
F Mutual recognition of imputation credits

For a number of participants, the single step that would do most to strengthen trans-Tasman economic relations would be mutual recognition of dividend imputation tax credits (MRIC).¹ Under MRIC, each government would recognise the imputation credits attached to dividends distributed to their resident shareholders by companies resident in the other country. It is a long-standing issue, having been debated for at least 20 years.

The Commissions have undertaken in-depth analysis of MRIC. In addition to consideration of the input from submitters (box F.1) and from participants in roundtables, a technical workshop of experts was held in late October 2012. The workshop provided an opportunity to obtain further technical input from the business, academic and policy communities, and to expose the Commissions' own analysis to expert scrutiny. Focal points for the workshop were modelling of MRIC undertaken by the Centre for International Economics (CIE) for the Australia New Zealand Leadership Forum (sub. 58) and by the Australian Commission (supplementary paper G).²

F.1 Background

Most governments tax both the income generated within their economies (the 'source principle') and the world-wide income of their residents (the 'residence principle'). This results in double taxation of income when an earner is a resident of one country and the income is earned in another.

Double taxation has harmful effects on the international exchange of goods and services and cross-border movements of capital, technology and people. In

¹ The terminology is different in each country. New Zealand refers to 'imputation', whereas Australia refers to 'franking'. The process, however, is the same in each country. In this paper, the term imputation is used to refer to both.

² The workshop papers are available at <http://transtasman-review.productivity.gov.au/>.

recognition of the need to remove this obstacle to the development of economic relations between countries, both the UN and the OECD have developed Model Conventions for double tax agreements (UN 2011; OECD 2010). These provide a basis for allocating taxing rights between the source country, within which income is generated, and the country of residence of the income earner. A broad principle reflected in the Conventions is that the source country generally has first taxing rights on business income where a minimum threshold of physical presence by the business is met, with the business owner's country of residence recognising tax paid in the source country. The double tax arrangements between Australia and New Zealand broadly conform with the OECD Convention.

One element of double taxation not addressed by double tax agreements is where a company earns income in one country and its shareholders are resident in another. This omission reflects that most countries operate the 'classical system' for taxing companies and their shareholders. Under the classical system, a company is taxed on its earnings as an entity in its own right, and dividends are additionally taxed as income in the hands of shareholders. In other words, taxation of company income at both the company and shareholder level is an intended feature. Many countries, however, tax capital income such as dividends relatively lightly. For example, they have social security taxes that apply only to labour income, or they tax capital income at lower rate than labour income (OECD 2007).

Box F.1 Participants' comments on MRIC

Mutual recognition has advantages

Under mutual recognition the capital markets of Australia and NZ would become more integrated and competitive. The pool of investors from which capital could be sourced would be expanded and the cost of capital reduced as equity returns would no longer carry the tax inefficiency from double taxation. (ANZ, sub. 50, p. 6)

Australia and New Zealand cannot progress to a genuine single economic and investment market without mutual recognition of franking credits. (Australian Bankers' Association, sub. 37, p. 1)

The lack of mutual recognition of MRIC is discouraging to Temperzone's efforts to expand the growth of its exports and the resultant inefficiency of capital investment decisions is detrimental to the New Zealand economy. (Temperzone, sub. DR63, p. 1)

Under MRIC, the capital markets of Australia and New Zealand would become more integrated and efficient. A deeper pool of capital would result. Vibrant competitive capital markets are essential if Australasia wishes to fully capture the opportunities arising from Asian growth. (Institute of Finance Professionals, sub. DR92, p. 2)

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Box F.1 (continued)

Essentially, the lack of mutual recognition of tax credits is a form of tariff on trans-Tasman investment flows. As a result, resources are not allocated efficiently because of the incidence of double taxation on the same income flow, which results in distortion of investment decisions. (New Zealand Institute of Chartered Accountants, sub. DR116, p. 6)

The two countries would be affected differently

CPA Australia supports the introduction of a Mutual Recognition Regime [MRR] in respect of imputation credits between Australia and NZ. any MRR is likely to be more costly for Australia than for NZ, given the greater Australian investment in NZ than vice versa. Solutions for addressing this would need to be considered as part of any MRR. One option could be to require each country to pay some form of subsidy to the other for the tax credits provided by the other country to its residents. This approach would address the higher cost of an MRR for Australia, thereby making it more economically viable for an MRR to be negotiated between the two countries. (CPA Australia, sub. 53, pp. 2–3)

Time to bring the issue to a conclusion

Whilst accepting that the issues are complex, given the length of time over which this issue has been considered, the Group believes that it is preferable that a resolution is reached in order to bring finality to the issue. (Corporate Taxpayers Group, sub. DR65, p. 1)

More leadership, not more analysis, is needed to bring this issue to a successful conclusion. (Australia New Zealand Leadership Forum, sub. DR120, p. 2)

Unilateral action?

Should the Australian Government not support a full mutual recognition policy, NZVCA considers the New Zealand Government should still consider a policy whereby a full tax credit is available in New Zealand for Australian franking credits. This policy may give rise to an initial revenue loss to the New Zealand Government. However, NZVCA considers longer term benefits to New Zealand will outweigh any initial cost. (New Zealand Venture Capital Association, sub. 32, p. 2)

Australia and New Zealand have adopted a different approach to mitigating the double taxation of company income, by each adopting a dividend imputation system. This is a mechanism that integrates taxation of company income and the personal income of shareholders. It works by taxing dividends in the hands of shareholders on the basis of the pre-tax company income that underlies the dividends, but with shareholders being able to claim a credit for tax paid at the company level (figure F.1). This, in effect, makes the company tax a withholding tax (Bob Officer, pers. comm., 31 October 2012).

The motivation for this integrated approach, which was introduced in Australia in 1987 and in New Zealand in 1989, is to achieve tax neutrality with respect to: business organisational form (incorporated or unincorporated); financial structure (debt or equity); and companies' income distribution policies (earnings retention or distribution). Neutrality promotes economic efficiency by avoiding tax differentials that discriminate amongst different forms of investment. The imputation regime also:

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- helps to avoid the ‘agency costs’ that can arise where the tax regime encourages companies to retain rather than distribute earnings (thus lessening the disciplines that are imposed when companies have to go to their shareholders for new capital)
 - contributes to corporate financial resilience (by avoiding incentives to gear up with tax-deductible interest-bearing debt) (Bob Officer, pers. comm., 31 October 2012; Peter Swan, pers. comm., 31 October 2012).

Australia’s Henry Review observed that:

Dividend imputation continues to provide benefits such as neutrality around financing and entity choices. It also enhances the integrity of the tax system by reducing the benefits of minimising company income tax. These benefits mean that dividend imputation should be maintained in the short to medium term (Australia’s Future Tax System Panel 2010, p. 42).

Neither Australia nor New Zealand apply their imputation arrangements to dividends received from companies based in the trans-Tasman partner country. An exception — known as the ‘triangular arrangement’ — was introduced in 2003 and applies to Australian companies with both operations and shareholders in New Zealand, and vice versa. This arrangement is described in Appendix F.1. It has very limited application.

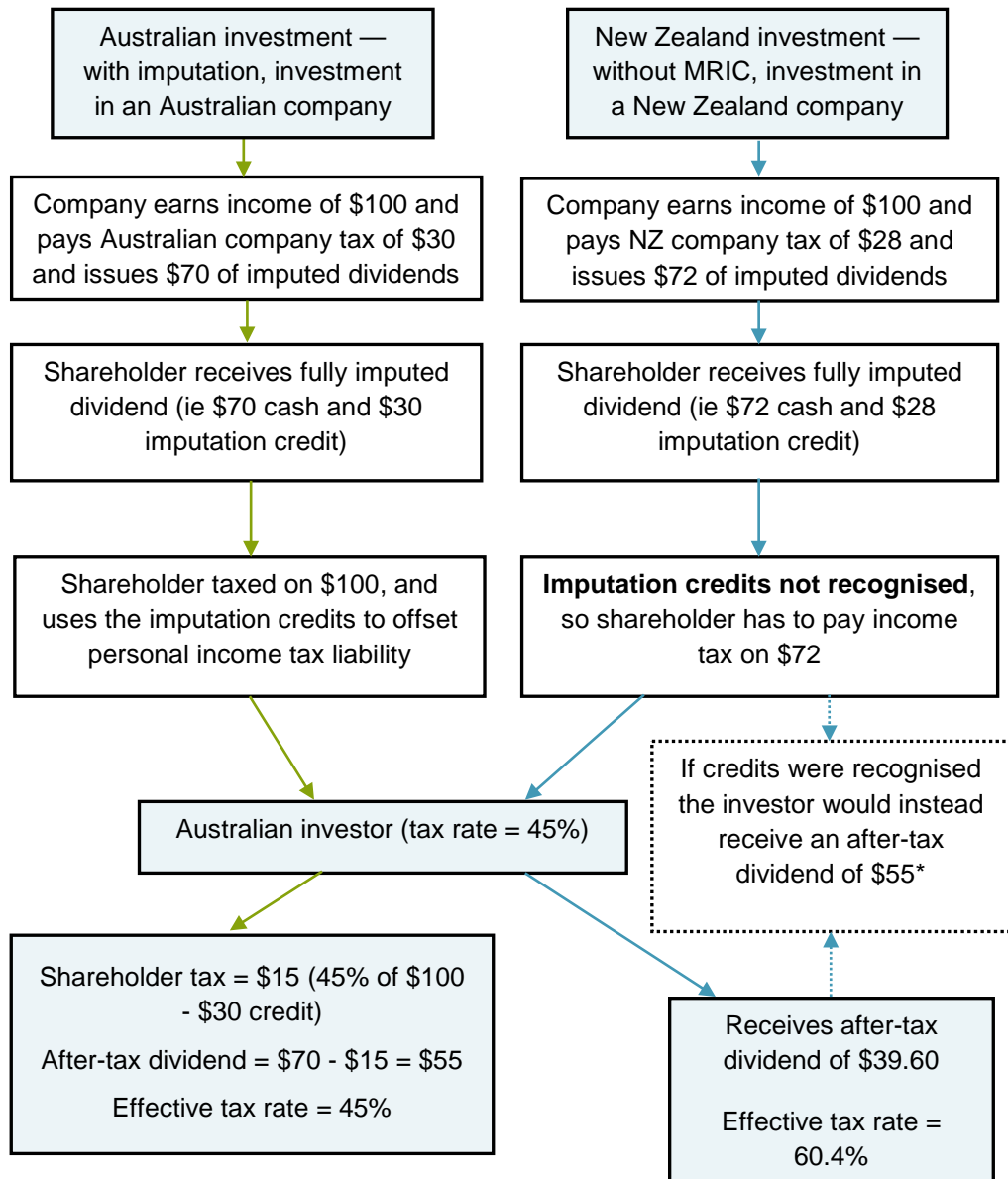
Non-recognition of the imputation credits of one trans-Tasman country by the other results in dividends received by Australian and New Zealand shareholders from trans-Tasman companies — those with trans-Tasman shareholders and/or operations — being taxed more heavily than dividends received from domestic companies. In effect, dividends paid across the Tasman are subject to double tax (company income tax in one country and shareholder income tax in the other).

MRIC would extend the boundaries of each country’s imputation system. Australian and New Zealand shareholders of trans-Tasman companies would be treated in the same way as domestic shareholders. This would extend to the trans-Tasman corporate sector the benefits that prompted each country to adopt the imputation system domestically.

While MRIC would remove the double tax that applies when company income is distributed across the Tasman, it would not remove double taxation of Australian and New Zealand capital invested in the rest of the world. This could increase the propensity for Australasian investors and companies to invest in the trans-Tasman partner country, relative to third countries. The question of whether that would be inefficient is examined later in this paper.

Figure F.1 How current tax settings impact trans-Tasman investment returns

Example of an Australian investor investing in an Australian and a New Zealand company.



F.2 What is the issue?

Allocative inefficiency

The different tax treatment of domestic and trans-Tasman dividends distorts decisions by Australian and New Zealand investors about whether to invest domestically or trans-Tasman. It can also distort investment decisions made by Australian and New Zealand companies. It creates a home-country bias, that is Australian and New Zealand companies tend to be owned more by their respective nationals than by trans-Tasman investors, and — subject to a qualification explained in the next section — companies tend to invest in their home country, rather than in the trans-Tasman market as a whole. These biases result in inefficient allocation of capital and less-than-optimal portfolio diversification by investors.

For firms, the home bias effect occurs because the level of post-tax returns for shareholders can affect their cost of capital (the minimum return required to elicit funds for investment). Shares that offer imputed dividends can generate lower pre-tax returns to meet investors' required post-tax rate of return. Hence, firms have an incentive to bias their investments toward those that enable dividends to be paid with imputation credits attached. Where imputation credits are recognised for tax paid on domestic earnings, but not for earnings from across the Tasman, firms have an incentive to bias the allocation of their capital to within their home economy (box F.2).

Box F.2 The effect of cross-border double tax on a New Zealand investor's choice of investments

Assume a New Zealand investor requires a minimum 6 percent post-tax rate of return to invest.

With a 33 percent personal tax rate under an imputation credit regime, the investor would require the company to generate a pre-tax return of 9 percent to deliver the required post-tax return ($9.0 \times 0.67 = 6.0$).

For an investment into Australia, however, the minimum pre-tax return required is higher. Again assuming a 33 percent personal tax rate, an Australian company tax rate of 30 percent, and no New Zealand recognition of Australian imputation credits, the pre-tax rate of return required is 12.8 percent ($12.8 \times 0.7 \times 0.67 = 6.0$).

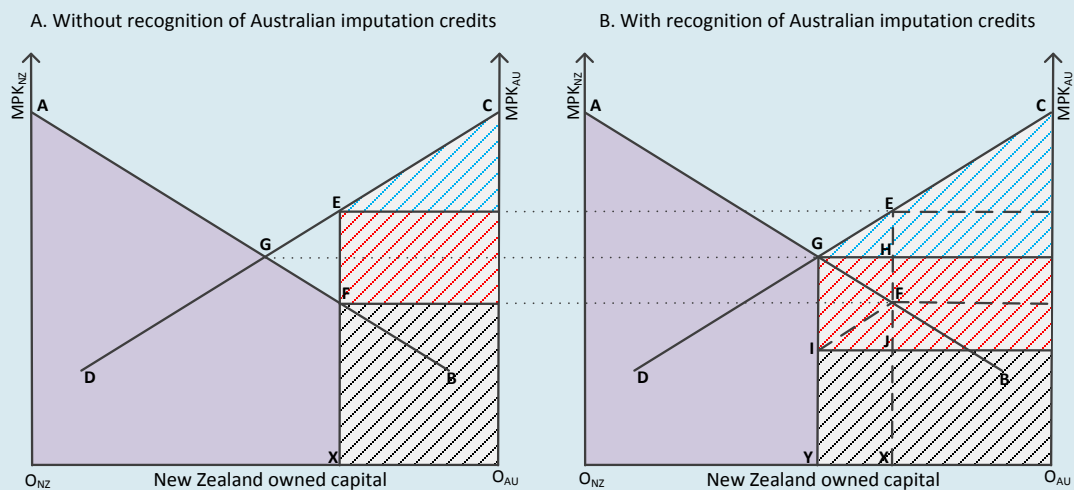
Thus, the investor will have an investment bias toward New Zealand. In this example, otherwise comparable Australian investments need to yield nearly 4 percentage points more (in other words to have a 44 percent higher rate of return) than domestic investments to be attractive.

The economic cost of the allocative inefficiency arising from these distorted investment incentives is explained further in box F.3.

Box F.3 The allocative inefficiency caused by double taxation

Figure F.2 shows, in a stylised manner³, the inefficiency resulting from the misallocation of capital when returns to trans-Tasman capital are subject to two layers of tax. It shows the allocation of New Zealand-owned capital between the two countries, with and without the New Zealand tax authorities recognising Australian imputation credits (figures F.2A and B respectively).

Figure F.2 Taxation of New Zealand owned capital



The base of each graph (O_{NZ} to O_{AU}) represents the total amount of New Zealand capital available for investment in both countries. Any point along the base represents a division of the capital between the two countries, with New Zealand-located capital measured from O_{NZ} and Australia-located capital measured from O_{AU} . The vertical axes are the marginal product of that capital when invested in New Zealand (MPK_{NZ} , left axis) and in Australia (MPK_{AU} , right axis). The respective MPK schedules, AB for capital invested in New Zealand, and CD for capital invested in Australia, are downward sloping on the basis that the marginal product of capital falls as the quantity increases.

The areas under the AB and CD lines represent the outputs generated from the New Zealand capital in each country when it is combined with other factors of production.⁴ In the case where New Zealand does not recognise Australian imputation credits (figure F.2A), $O_{NZ}X$ is the amount of capital allocated to New Zealand and $O_{AU}X$ is that allocated to Australia.

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³ In particular, the diagrams are not drawn to a scale that reflects the actual structure of the economies and the magnitudes of shifts in investment that would be involved.

⁴ Technically, the return is to all other factors of production. Given that labour is the dominant other factor, henceforth the term 'labour' is used as a convenient shorthand.

Box F.3 (continued)

Total output in New Zealand is represented by the area shaded mauve, and in Australia by the striped areas. That allocation is determined by the point where the pre-New Zealand-tax and post-Australian-tax returns to New Zealand investors are equalised across the Tasman. The Australian company tax paid under this allocation is depicted by the red-striped area. (Personal tax applicable to investors in New Zealand is not shown as it is the same whether the investor invests in Australia or New Zealand.)

Assuming homogeneous factors earning their marginal products, the blue-striped area represents labour income, and the black-striped area represents post-Australian-tax capital income. The significance of this decomposition is discussed later, in box F.6.

In figure F.2B, New Zealand recognises Australian imputation credits. This removes the effect of Australian company tax from New Zealand investors' capital allocation decisions, as they receive a tax credit in New Zealand for company tax paid in Australia. The allocation of New Zealand capital that now equalises returns is $O_{NZ}Y$ in New Zealand and $O_{AU}Y$ in Australia — that is, some New Zealand capital (XY) shifts from New Zealand to Australia. This expands output, and the company tax base, in Australia. The stock of New Zealand capital produces greater output overall, represented by the area of the triangle EFG . This triangle represents the gain from improved efficiency in the allocation of New Zealand capital between the countries.

A parallel analysis applies to the trans-Tasman allocation of Australian-owned capital with, and without, recognition by Australia of New Zealand imputation credits. Recognition of New Zealand credits would result in a shift of Australian capital to New Zealand, an expansion of output and of the company tax base in New Zealand, and an efficiency gain. The gain in allocative efficiency from *mutual* recognition of imputation credits would be the sum of the gains from the improved allocation of both New Zealand and Australian capital.

In each case, the country whose imputation credits are recognised captures all the efficiency gain and more besides, the latter at the expense of the recognising country. In figure F.2B, Australian company tax revenue increases by area $HJIG$, which is equal to area $EFIG$. This area is greater than the efficiency gain (area EFG) leaving the area GFI as a loss to New Zealand. New Zealand's recognition of Australian imputation credits would expand the output of the two economies combined, but New Zealand itself would lose out.

There can be further effects from the shift of capital leading to even larger transfers from the recognising country to the other. Shifts of capital could result in changes in rates of return to capital, and in wage rates. To the extent these transfers are between capital owned by residents of one country to labour in the other, they will be between the two countries as well as between capital and labour. These further effects are analysed in box F.6.

This analysis — albeit highly stylised — points, thus far, to two conclusions. First, removal of the double tax on trans-Tasman investment would deliver a joint net benefit. Second, it is not in the interests of either country to recognise imputation credits unilaterally.

Source: Benge and Slack (2012).

Firms with access to international capital

For a firm whose shares are traded globally, how its local shareholders are taxed may have little or no influence on its cost of capital, and therefore on its investment allocation decisions.

To understand this, suppose the existing imputation credits for domestic shareholders were to be removed. This would reduce after-tax returns for domestic shareholders who, as a result, could be expected to reweight their portfolios toward alternative forms of capital (debt, offshore equity, property, etc.). This would lower domestic share prices and restore the after-tax rate of return required by investors, resulting in a higher cost of capital for firms. However, non-resident shareholders, unaffected by the removal of imputation credits, would find the shares more attractive. These investors could be expected to buy and drive the share price back up. If there were full substitutability of foreign for domestic capital, the end result should be that share prices — and therefore firms' cost of capital and their investment allocation decisions — are unaffected. Commenting on this issue the Henry Review stated:

Since companies seeking to expand offshore would typically be larger and more mature, they should have better access to international capital than other businesses in the domestic economy. Providing imputation credits to resident shareholders for foreign tax paid would not directly assist them in raising foreign capital and so could have limited impact on their cost of capital and their potential for offshore expansion. It would, however, increase resident shareholders' post-tax returns from their savings. (Australia's Future Tax System Panel 2010, pp. 200–01)

When analysing the effects of adopting MRIC, therefore, it is necessary to differentiate between firms that have access to global capital markets and those that do not. For fully global firms, adoption of MRIC would tend not to affect their investment allocation decisions. Such firms should also be relatively indifferent about any changes in the ownership of their shares induced by MRIC.

Dynamic efficiency

Participants in this study have argued that the economic costs of not recognising trans-Tasman imputation credits extend beyond 'allocative' inefficiency. They highlight that 'dynamic' benefits are also being foregone (box F.4). These include the benefits from the greater choice in products and services, economies of scale, and greater competition and innovation.

Box F.4 **Participant views on dynamic efficiency**

...an important benefit of [MRIC] may well be the ability of New Zealand and Australian small and medium sized businesses not only to export to each other's market but also through this process learn the skills to export to third markets. (ANZLF, sub. 58, p. 11)

[MRIC] should boost product and service market competition, lower compliance costs for business (particularly the SME market) and generally promote the development of a Single Economic Market. (New Zealand Venture Capital Association, sub. 32, p. 1)

... the gains we have analysed are not the only, or even necessarily the most important gains. Mutual recognition will boost product market competition, reduce incentives for artificial tax structuring, make it less costly for businesses to set up trans-Tasman subsidiaries and reduce pressure for a race to the bottom in company tax rates. Our investment efficiency analysis is comparative static and ignores further dynamic gains that can arise from new products and processes. (Benge and Slack 2012, p. 15)

There are potential dynamic efficiency gains associated with MRIC, to the extent that additional investment across the Tasman results in increased penetration of the markets of each economy by the firms of the other. The size of these gains depends on the extent to which competition and innovation would increase. These effects, by their very nature, are virtually impossible to quantify. Dynamic efficiency gains were not quantified in either the CIE or Commission modelling.

Costs of tax compliance and complexity

Another aspect of this issue concerns the complexities that arise where companies adopt strategies to mitigate the effect of the double tax. Such strategies include:

- financing trans-Tasman investments with debt to the fullest extent possible. Because interest is deductible for the company, debt financing results in only one layer of tax
- using arrangements that shift income within a corporate group to where the shareholders are located, so-called 'transfer-pricing'
- avoiding use of the company form
- breaking up a company that operates across both economies in an effort to achieve New Zealand operations owned by New Zealand shareholders and Australian operations owned by Australian shareholders — whilst attempting to maintain operating links through contractual arrangements.

While these kinds of avoidance arrangements can help to lessen the extent of investment misallocation, they can be costly in other ways. For companies, they can reduce financial resilience, unnecessarily complicate management of the business, and increase tax compliance costs and uncertainties. For tax authorities

trying to preserve the integrity of the tax system, they give rise to a need to apply and administer countervailing measures, such as thin capitalisation and transfer-pricing rules. Table F.1 provides some examples of the costs and problems that can arise.

Table F.1 Case studies of tax planning challenges in absence of mutual recognition of imputation credits

<i>Case 1: Buying a subsidiary company in the trans-Tasman neighbour</i>	
Facts	A mid-sized (total assets circa \$NZ200m) New Zealand company (NZ Co) wishes to acquire a competitor company in Australia (Aus Co).
Preferred structure	NZ Co to acquire 100% of the shares in Aus Co, funded using \$20m in retained earnings and \$80m in debt from its NZ bankers.
Problems with preferred structure	NZ shareholders of NZ Co face two layers of tax on any dividends.
Potential solution	Establish Australian Limited Partner (ALP) to purchase Aus Co's assets, and wind-up Aus Co. ALP to be owned directly by NZ Co's shareholders so that tax paid in Australia can be offset against NZ Co's shareholders NZ tax liability.
Problems with proposed solution	The ALP structure is not suitable for trading in multiple states in Australia. The legal structure is inconsistent with the necessary management structure. ALPs are not widely used by Australian businesses, hence commercially unattractive. Substantial Australian stamp duty costs on winding up Aus Co.
Ultimate structure adopted	NZ Co establishes a new Australian holding company to purchase Aus Co which borrows the maximum amount permissible under the Australian thin capitalisation rules. Some of Aus Co's functions are transferred to NZ Co to enable transfer pricing of stock to maximise profits in NZ and minimise profits in Australia; resulting in duplication of some facilities and functions. NZ Co loses some key staff who are unwilling to relocate to New Zealand. However, the tax advantage of avoiding double tax outweighs the commercial inefficiency from duplication of operations and loss of experienced staff.
<i>Case 2: Supplying and servicing products across the Tasman</i>	
Facts	Aus Co is a mid-sized (total assets \$500m) entity that supplies heavy equipment. Many of its customers have NZ operations. Sales to NZ increase rapidly, with Australia-based staff travelling to NZ to meet customers, negotiate contracts and provide follow up. The operations continue on this basis for four years. No NZ tax has been paid because Aus Co is thought to have no NZ tax presence.

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Table F.1 (continued)

Case 2: Supplying and servicing products across the Tasman

Preferred structure	Continue with current structure but without the tax complications.
Problems with preferred structure	<p>NZ's Inland Revenue Department investigates Aus Co and concludes that it has a 'permanent establishment' in NZ because executives negotiate contracts in NZ, and operate out of an office of one of Aus Co's major customers. Aus Co is assessed for NZ tax for the last four years. The implications are:</p> <ul style="list-style-type: none"> • significant NZ tax payable. Although this can be claimed as a credit against Australian tax, the NZ tax does not earn franking credits, resulting in Aus Co overdrawing its franking account • Aus Co faces large retrospective tax bill • the costs of attempts to persuade Inland Revenue to withdraw its position amount to \$500k.
Ultimate structure adopted	Aus Co concludes that it cannot justify operating in New Zealand if it is to suffer double tax resulting in a 39% reduction in return relative to a situation with mutual recognition. It withdraws from the New Zealand market.

Case 3: A trans-Tasman integrated SME consultancy firm

Facts	A consultancy firm delivers advice to clients on both sides of the Tasman. Roughly half of the consultants who 'own' the business live in Australia, the other half in NZ.
Preferred structure	It is commercially desirable that the consultants have an equal equity share in the firm and be remunerated from long-term profits.
Problems with preferred structure	<p>The business grew out of a New Zealand operation and is established in the form of a New Zealand company. The consultants who own the company are shareholders and share in profits. New Zealand-based owners are remunerated by way of imputed dividends while Australian consultants receive unfranked dividends.</p> <p>While the consultants accept the tax consequences of where they live (different tax rates on the same income levels), double taxation on one side of the Tasman results in significant income differences, despite similar contributions to the profit.</p>
Potential solution	<p>The options for this firm are:</p> <ul style="list-style-type: none"> • Cease using the corporate form — use partnership, limited partnerships etc. • Break up the firm and operate separately. Use contractual agreements to try to retain the trans-Tasman service that clients value.
Problems with proposed solution	The problem is that the corporate form is simpler and has many commercial advantages especially for a firm focusing on long-term growth. The tax system is effectively restricting the choices available to business.
Ultimate structure adopted	Not yet resolved.

Sources: Cases 1 and 2, Australia New Zealand Leadership Forum (sub. 58); Case 3, Robin Oliver (sub. DR130).

F.3 Benefits and costs of MRIC

A possible solution to the capital market inefficiencies outlined above would be for Australia and New Zealand to extend their dividend imputation regimes across the Tasman (that is, to adopt MRIC). Each country would recognise the imputation credits attached to the dividends distributed by companies in one country to shareholders in the other. As a result, dividends in the hands of a shareholder would be taxed on the amount of company income (pre company tax) underlying the dividend, at the shareholder's tax rate. The shareholder would claim a tax credit for the company tax already paid at the company level (to the other government). The result would be a single layer of tax, at the shareholder's personal (or institutional) rate, irrespective of whether dividends were received from a domestic company or from one across the Tasman.

Effects on tax revenue

An obvious consequence of adopting MRIC would be a reduction in tax revenue for both governments, as a result of each government recognising the company tax paid to the other as a tax credit. The extent to which tax payable by shareholders would reduce would depend on their income tax rate compared with the company rate that had been applied to the income from which dividends had been paid (box F.5).

Appendix F.2 provides a range of 'first round' estimates of the potential annual tax revenue reductions for each government. The extent of these depends on factors including the source of the data used to estimate company earnings, the extent to which earnings are distributed as dividends, the eligibility of shareholders to claim imputation credits, and the tax rates of recipient shareholders. As such, a range of figures is presented based on different assumptions. A selection of those estimates are summarised below in table F.2.

MRIC could be expected to lead to an increase in the average rate of dividend distribution by trans-Tasman companies. The effect of this on government revenues would depend on the tax rates of recipient shareholders relative to the company rate at which the underlying income had been taxed (currently 28 percent in New Zealand and 30 percent in Australia). For example, to the extent that the shareholders receiving the additional dividends were on the top marginal tax rates (45 percent in Australia, ignoring the Medicare levy, 33 percent in New Zealand, ignoring the ACC levy), they would pay some additional tax compared to none if no additional dividends were paid. But to the extent the shareholders receiving the additional dividends are on lower tax rates, additional

distributions could result in less government revenue as the result of the shareholders becoming eligible for tax refunds.

Box F.5 MRIC — what tax does the shareholder save and the government forego?

Suppose the share of profits of a company in New Zealand owned by an Australian investor is \$100 and this is fully distributed. New Zealand company tax on the \$100 of profit is \$28, and gives rise to an imputation credit of \$28. What is the fiscal cost to Australia if it recognises this credit? Consider two cases: in case 1, the investor has a marginal tax rate of 45% (the top personal marginal tax rate in Australia) and, in case 2, a marginal tax rate of 15% (the tax rate applicable to superannuation funds).

	<i>Case 1</i> <i>(shareholder tax rate = 45%)</i>	<i>Case 2</i> <i>(shareholder tax rate = 15%)</i>
Australian tax collected without imputation credits	$0.45 * \$72 = \32.40	$0.15 * \$72 = \10.8
Australian tax collected with recognition of imputation credits	$0.45 * \$100 - \$28 = \$17$	$0.15 * \$100 - \$28 = -\$13$ (refund)
Fiscal cost to Australia	$\$(32.40 - 17) = \15.40	$\$(10.8 - (-13)) = \23.8
Fiscal cost as percent of imputation credit	$(15.40/28) * 100 = 55\%$	$(23.8/28) * 100 = 85\%$

The fiscal cost is 55 percent of the imputation credit in case 1 and 85 percent in case 2. The reason why the tax saving to the shareholder, and fiscal cost to the government, is less than the amount of the imputation credit is because the investor's income is grossed up to include the whole of his/her share of the company's pre-New Zealand-company-tax profit. In effect, some of the credit is used up in paying the tax on the additional income that is attributed to the investor.

Table F.2 Indicative first-round fiscal costs of MRIC

	<i>Australia</i>		<i>New Zealand</i>	
	<i>ABS data</i>	<i>SNZ data</i>	<i>ABS data</i>	<i>SNZ data</i>
Low estimate (Assuming 25% dividend distribution ratio, top marginal tax rate taxpayers)	NZ\$190m	NZ\$275m	NZ\$135m	NZ\$100m
High estimate (Assuming 75% dividend distribution ratio, superannuation saving vehicle tax rate) ^a	NZ\$750m	NZ\$1015m	NZ\$220m	NZ\$160m

^a Superannuation funds in Australia and portfolio investment entity funds in New Zealand.

Source: New Zealand Inland Revenue Department (see appendix F.2).

The amounts involved in the latter case would be greater in Australia than in New Zealand because Australian superannuation funds are taxed at 15 percent, and also receive tax refunds where imputation credits result in a negative shareholder tax liability. In New Zealand, in the same situation, a taxpayer can carry forward imputation credits, as a credit against future years' tax liabilities, but is not eligible for a refund.

Another consideration is that Australia has a capital gains tax whereas New Zealand does not. This means that, for Australia, a change in tax revenue resulting from a change in company distribution policies could have an offset in the amount of revenue raised from the capital gains tax. All other things equal, increased distributions would result in less appreciation in share prices and hence smaller capital gains tax receipts when shares are sold (the capital gains tax being applied on realisation rather than on an accruals basis).

Further, MRIC would result in some wider economic adjustments that would have additional tax-revenue implications. As discussed, increased post-tax rates of return on trans-Tasman investment would be expected (and indeed are intended) to result in reallocation of investment between the two countries, and between them and third countries. This reallocation is necessarily associated with movements in company income and hence corporate tax revenues. Shifts of investment would shift company income and hence company tax revenue from the country recognising credits to the country whose credits were recognised (as outlined in figure F.2 in box F.3). They would also be expected to result in adjustments in rates of return to capital and labour in each country (as outlined in box F.6), with consequential effects on taxes paid both by households (employees and shareholders) and companies.

Given the multiple interactions involved, economic modelling is required to gauge the tax revenue effects overall. Two general equilibrium modelling exercises were available to the Commissions, one using CIE-G cubed prepared by the Centre for International Economics (CIE) for the Australia New Zealand Leadership Forum (sub. 58) and the other purpose-built by the Australian Commission (supplementary paper G).

Model estimates of the possible 'all-up' fiscal costs of MRIC (combined first and second-round effects for each government) are presented in table F.3. The ranges reflect variations in the dividend distribution ratio and other parameters.

Table F.3 **Modelling results: impact of MRIC on annual tax revenue**
2012 NZ\$m

	<i>Trans-Tasman</i>	<i>Australia</i>	<i>New Zealand</i>
CIE model ^a			
First round	-325 to -975	-247 to -741	-64 to -257
Long run equilibrium	Not reported ^b	Not reported ^b	Not reported ^b
SMRIC model ^c			
First round	-254 to -1260	-194 to -782	-62 to -477
Long run equilibrium	-386 to -1 805	- 222 to -1626	+168 to -859

^a **CIE** is the Centre for International Economics. The Australia-New Zealand Leadership Forum commissioned CIE and the NZ Institute of Economic Research to model MRIC (sub. 58). ^b In the CIE model, revenue forgone is recovered through increases in alternative broad-based tax instruments (lump sum tax and GST). The amounts of revenue involved are not reported. ^c **SMRIC** is the Australian Commission's purpose-built model to explore MRIC. A detailed account of SMRIC is available in supplementary paper G. SMRIC uses US\$ as its base currency. Figures here are adjusted to NZ dollars based on the 27 November 2012 US\$/NZ\$ exchange rate of 0.8231.

Sources: Australia New Zealand Leadership Forum sub. 58 (CIE model); Australian Commission estimates (SMRIC model).

Inter-country transfers of income arising from MRIC

The introduction of MRIC would result in inter-country income transfers. For firms that cannot access global equity markets, additional equity from the trans-Tasman partner would tend to drive down their cost of capital, and thus encourage additional investment. This reallocation of capital to higher valued uses across the Tasman would generate efficiency gains. The changes in relative prices that induce this shift would have a series of distributional consequences.

In the destination economy, these would be:

- increased returns to complementary factors as the increase in the capital stock increases their productivity, mirrored by a reduction in returns to capital (both domestic and foreign owned)
- an increase in company and income tax revenue from the increased output and income.

In the source (capital-owning) economy, these would be:

- decreased returns to complementary factors as their productivity decreases with reduced capital
- a decrease in company and income tax revenues as output and income falls and imputation credits are recognised.

These effects are examined in more detail in box F.6.

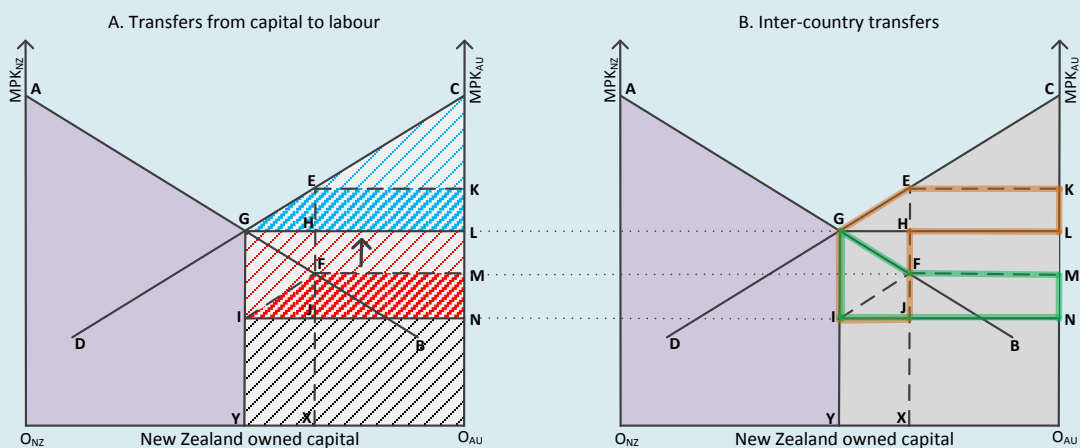
Box F.6 Inter-country distributional effects of MRIC

If MRIC were to result in a sizeable net shift of capital from one trans-Tasman partner to the other, this could in turn result in a shift in incomes between owners of capital in one country and labour in the other. This transfer of income between the two countries would be in addition to the transfer arising from the shift in the company tax base described in box F.3. Figure F.3A (below), which essentially replicates figure F.2B in box F.3), shows this effect in the case of New Zealand recognising Australian imputation credits. The corresponding analysis of the effects of recognition by Australia of New Zealand's imputation credits is not shown. The effects of MRIC, that is of mutual recognition, would be the net result of combining the two cases.

In figure F.3A, New Zealand recognition of Australian imputation credits induces a shift of New Zealand capital to Australia (from $O_{AU}X$ to $O_{AU}Y$). This increase in the amount of New Zealand capital in Australia drives down its pre-tax rate of return to capital in Australia (on the vertical axis from $O_{AU}K$ to $O_{AU}L$). The counterpart to this fall in the rate of return to capital is an expansion of Australian labour income. With more capital, there is an increase in the demand for labour, causing wages to be bid up. While the pre-tax return on New Zealand capital in Australia is driven down, it is still profitable for New Zealand firms to invest because their shareholders can now claim imputation credits for Australian company tax.

These shifts in factor returns result in a transfer of income — in effect a partial shifting of the incidence of the tax benefit from MRIC — from shareholders in New Zealand to labour in Australia. This transfer is represented in figure F.3A by the highlighted areas MNIF, reflecting the reduced capital income from the fall in its rate of return, and KLGE, representing the increase in labour income.

Figure F.3 MRIC transfers, New Zealand recognises Australian credits



(Continued next page)

Box F.6 (continued)

Figure F.3B brings together these inter-country transfers of income from capital owned by residents of one country to labour in the other with the preceding analysis of allocative efficiency and the associated shifting of the corporate tax base (in box F.3). As a result of New Zealand recognising Australian imputation credits, Australia would derive two elements of additional income: a gain in company tax revenue (area HJIG) and a gain in labour income (area KLGE). Together these comprise the area outlined in orange. Meanwhile, New Zealand would lose income represented by areas GFI (the additional company tax now going to Australia, less the efficiency gain) and MNIF (New Zealand's reduced capital income from the lower rate of return on its capital invested in Australia). Taken together these areas comprise the area outlined in green. Subtracting New Zealand's loss of income from Australia's gain leaves the gain in allocative efficiency represented by triangle EFG.

From this analysis, it is further evident that it would not be in either country's interest unilaterally to recognise the imputation credits of the other. It is also evident that any significant imbalance in the size of the trans-Tasman flows of capital induced by MRIC could leave the country experiencing the larger outflow worse off — despite the overall efficiency gains.

Source: Bengé and Slack (2012).

Again, however, there is an important caveat to this analysis. To the extent the two economies are integrated with global capital markets, shifts of trans-Tasman capital mostly would displace, and be back-filled by, global capital, resulting in a smaller or inconsequential change in each economy's capital stock. In that case, there would be correspondingly less change in the corporate tax bases, smaller changes in relative returns to capital and labour and hence less by way of inter-country transfer. This is a direct counterpart to the discussion in section F.2 of how, for firms with access to global capital, adoption of MRIC would be unlikely to result in a net reallocation of capital between the two economies.

Investment diversion — a potential cost?

In general, arrangements that remove barriers to flows of capital between countries are welfare enhancing. But as MRIC would be a bilateral arrangement confined to Australia and New Zealand, there is a question about whether it could result in inefficient diversion of capital invested in the rest of the world into the trans-Tasman partner (analogous to the costs that can arise from trade diversion under preferential trade agreements).

As discussed in supplementary paper C (box C.6), preferential liberalisation of barriers to investment can result in inefficient investment diversion when the

barriers that are being removed preferentially are of a sort that create economic rents. MRIC does not fall into this category.

That said, MRIC would indeed be likely to induce some Australian investment in third countries to shift to New Zealand, and some New Zealand investment in third countries to shift to Australia. This would happen because the capital owners would earn a higher rate of return from the relocated investment given that company tax paid in the trans-Tasman partner country would be available as a tax credit. But it would also increase the income of *Australasia* because tax paid in Australasia is part of its overall income, unlike tax paid in third countries.

However, as with MRIC-induced trans-Tasman shifts of investment, and the associated company income and tax on that income, the gain from capital being diverted from the rest of the world would accrue to the country whose imputation credits were being recognised and at the expense of the country recognising them. This is another element of the potential for MRIC to result in an inter-country transfer of income.

Effects of MRIC on GDP and national income

Results from the quantitative models on the effects of MRIC on the output (GDP) and income (GNI) of each country, and the two countries combined, are shown in table F.4. The CIE reported results for one set of parameters (sub. 58). The SMRIC GDP and GNI results shown here are for one illustrative parameter set, discussed further in supplementary paper G. Supplementary paper G presents ranges of results based on combining a large number of different parameter values.

Table F.4 Illustrative estimates of country outcomes
2010 US\$m per annum

	<i>Trans-Tasman</i>	<i>Australia</i>	<i>New Zealand</i>
CIE model			
Capital movement ^a	na	na	na
Change in GDP	206	67	139
Change in GNI	Not reported	Not reported	Not reported
SMRIC model			
Capital movement ^a	148	-47	195
Change in GDP	38	-33	71
Change in GNI	46	-74	120

^a Net change in capital stock.

Sources: Australia New Zealand Leadership Forum (sub. 58); Australian Commission estimates (supplementary paper G).

The SMRIC model was used to test a large number of alternative scenarios, based on different combinations of assumed parameter values within broad ranges regarded as feasible by participants at the Commissions' workshop and in relevant literature. This sensitivity testing (comprising around one million scenarios) was designed to account for the degree of uncertainty about key parameters, notably those capturing the responsiveness of trans-Tasman investment to changes in the cost of capital, and the substitutability of global capital for local capital.

The simulation outcomes are summarised in figures 1 and 2 in supplementary paper G. A majority of the parameter combinations result in GDP and GNI outcomes that are negative for Australia and positive for New Zealand.

These SMRIC simulation results highlight that initial imbalances in the amounts of equity capital Australia and New Zealand have invested in the other are a major driver of the respective gains and losses for each country. With the existing Australian stock in New Zealand larger than New Zealand's in Australia, symmetric responses generate correspondingly larger shifts of capital from Australia to New Zealand than vice versa. Those in turn tend to result in a net shift of the company tax base and of factor incomes (from owners of capital in one country to labour in the other) from Australia to New Zealand. Only where the responses to MRIC are markedly asymmetric – such that Australia's capital response is much less sensitive than New Zealand's to increased returns, or New Zealand's capacity to absorb additional capital is limited – do both countries share the efficiency gains.

A possible approach to balancing the country outcomes

As explained in chapter 2, in cases where a policy initiative would provide trans-Tasman net benefits but would likely involve a net cost for one country, the Commissions' approach is not to recommend that initiative, but to report the finding for consideration by the two Governments. The modelling results outlined above indicate that in the case of MRIC, in the majority of the scenarios modelled, there would be a net gain for New Zealand, a net loss for Australia, and a small net gain for the two countries combined.

That result stems from inter-country transfer of income. As discussed, modelling can provide insights into the relative orders of magnitude, and hence the net balance, of these income transfers. However, the quantitative results are sensitive to the assumptions used, and span a wide range. Even after adopting MRIC, it would be very difficult to isolate and quantify the resulting inter-country transfers of income with any confidence. This suggests that there probably is no feasible arrangement under which one country could compensate the other for MRIC-induced inter-country transfers of income, as such.

Another option for evening up an imbalance in inter-country transfers of income could be for the two governments to share the fiscal cost of the additional credits that each recognised (that is, the fiscal cost to New Zealand of recognising Australian franking credits, and to Australia of recognising New Zealand imputation credits).

An approach based on sharing the fiscal costs would recognise that the underlying problem that MRIC is trying to resolve is essentially the same as that which arises wherever two countries claim taxing rights to a single pool of income. In this particular case, one country is taxing company income at source, and the other when it is distributed to shareholders resident in the other country. Sharing the fiscal costs could work in the same direction as compensating for imbalances in inter-country transfers of income to the extent that the main underlying influence on inter-country income transfers (the respective sizes of the existing stocks of trans-Tasman equity investment) is also the principal driver of the revenue that would be forgone by each government.

Relationship to wider tax reforms

Both Australia and New Zealand have reviewed their tax systems from time to time. In Australia, the Henry Review considered possible alternatives to traditional company tax, such as the allowance for corporate equity (ACE) approach

(Australia's Future Tax System Panel 2010). The Australian Treasurer's Business Tax Working Group (BTWG) has since considered the ACE approach and has proposed that it should not be pursued in the short- to medium-term, but that it may be worthy of further consideration and public debate in the longer term. It noted that ACE's interaction with the dividend imputation regime is one of the design issues that would need to be considered (Australian Government 2012, p. 6).

While the BTWG did not consider the imputation system, it did support the objective of reducing Australia's company tax rate. In this regard, Gruen (2006; 2012) suggests abolishing dividend imputation and using the revenue saved to reduce the company tax rate. Officer (pers. comm., 31 October 2012) and Swan (pers. comm., 31 October 2012), on the other hand, attach significant weight to the benefits of the imputation system, as summarised in the introductory section of this paper.

In New Zealand, the Tax Working Group commissioned in 2009 to review the New Zealand tax system considered whether New Zealand should retain its dividend imputation regime, and concluded that it should (Tax Working Group, 2010).

It therefore appears likely that both Australia and New Zealand will each retain their dividend imputation regimes for at least the short- to medium-term. But if MRIC were to proceed, and one or other Government subsequently decided to adopt a new regime for taxing companies which did not include dividend imputation, then the mutuality necessary for MRIC to operate would no longer exist.

Appendix F.1: The triangular arrangement

In 2003 the Australian and New Zealand governments agreed to a reform that provides partial relief from trans-Tasman double taxation, but which is much more limited than MRIC. It provides that if an Australian company with shareholders in New Zealand also earns income and pays tax in New Zealand, then the company is able to attach New Zealand imputation credits when it pays dividends. The arrangement works in a similar manner for a New Zealand company that pays tax and has shareholders in Australia.

However, as the resulting imputation credits have to be allocated to all their shareholders on a pro rata basis (that is, 'streaming' is not allowed), and each country's credits can be used only to offset a domestic tax liability, a large proportion of such credits typically has no value. For this reason, few companies make use of the triangular arrangement, instead preferring to distribute dividends un-imputed and to retain available credits in their imputation accounts.

A worked example of the triangular arrangement follows. It is based on an Australian company that has two shareholders: an Australian shareholder with 60 percent and a New Zealand shareholder with 40 percent. The company earns \$3000 of income in Australia and \$1000 of income in New Zealand (in the same unit of currency). The respective company tax rates are 30 percent (Australia) and 28 percent (New Zealand), resulting in tax payments of \$900 in Australia and \$280 in New Zealand, and leaving \$2820 available for distribution as dividends (\$1128 to the New Zealand shareholder and \$1692 to the Australian shareholder). These details are summarised in table F.5.

Table F.5 **The triangular arrangement – worked example assumptions**

Shareholdings	
Australian	60%
New Zealand	40%
Company income, of which	\$4 000
In Australia	\$3 000
In New Zealand	\$1 000
Company tax paid	\$1 180
In Australia (30% rate)	\$900
In New Zealand (28% rate)	\$280
Dividends (assuming full distribution of post-tax income)	\$2 820
Australian shareholder (on 45% marginal tax rate)	\$1 692
New Zealand shareholder (on 33% marginal tax rate)	\$1 128

The extent of the difference that the triangular arrangement makes to the tax-paid return to the New Zealand shareholder, compared with no mutual recognition, and full mutual recognition, is shown in the table below.

Table F.6 The triangular arrangement — worked example

	<i>New Zealand 33% tax rate shareholder</i>		
	<i>Mutual recognition</i>		
	<i>Nil</i>	<i>Triangular</i>	<i>Full</i>
	<i>\$</i>	<i>\$</i>	<i>\$</i>
Dividend	1 128	1 128	1 128
Company tax attributable to NZ shareholder	472 [40% of 1 180]	472 [40% of 1 180]	472 [40% of 1 180]
Imputation credit	0	112 [40% of \$280]	472 [40% of \$1 180]
Shareholder tax	372 [33% of \$1 128]	409 [33% of (\$1 128+\$472)]	528 [33% of (\$1 128+\$472)]
Less imputation credit	0	112	472
Net shareholder tax	372	297	56
Total tax	844	769	528
Company	472	472	472
Personal	372	297	56
Effective rate	53%	48%	33%

Appendix F.2: Estimates of revenue costs

This appendix provides some New Zealand Inland Revenue Department estimates of the fiscal cost to New Zealand and Australia, respectively, should MRIC proceed (tables F.7 and F.8). These are static estimates that do not take account of ‘second-round’ effects stemming from how investment, and hence company tax on the income it generates, could shift between the two countries. The latter effects, including on the fiscal costs, are however, taken into account and reflected in the modelling results summarised in section F.3 of this paper.

The estimates shown are based on:

- Statistical data sourced from the Australian Bureau of Statistics and Statistics New Zealand on:
 - the stock of equity investment of each country in the other
 - dividends paid on portfolio investment, and earnings on FDI.
- Assumptions as to:
 - the proportion of FDI earnings distributed to ultimate shareholders who can claim imputation credits (note that the relevant distributions are those to ultimate shareholders, not intra-group distributions from a subsidiary in one country to a parent in the other).
 - the domestic tax rates applicable to the underlying shareholders in their country of residence.

Direct data on the proportions of FDI earnings that *currently* are distributed to ultimate shareholders are not available. Hence there is a need to make assumptions on this parameter. Given the uncertainties, a range of estimates is shown.⁵ In addition to the ‘base’ results, an indication is given of the possible revenue effects of changes in distribution policies that could be induced by MRIC. There are two elements to this.

First, the estimates show by how much the fiscal cost of recognising trans-Tasman imputation credits could change if MRIC were to cause FDI companies⁶ to alter

⁵ Note that these uncertainties do not arise with portfolio investment, for which official statistical data are available on dividends actually paid and received (hence there is no need to make assumptions about distribution ratios).

⁶ The introduction of MRIC should not result in any change in portfolio investment distribution policies, given that portfolio investment shareholders are not normally in a position to influence dividend policy.

their dividend distribution policies. The results, however, are comparatively insensitive to this factor.⁷ This is because the fiscal cost of recognising a credit for company tax paid in the other country is offset by personal tax on the underlying company income. The impact on tax revenues from additional distributions would be determined by the difference between the shareholder's personal tax rate and the other country's company rate, which can be either positive or negative. Shareholders on a higher rate than the other country's company rate would have additional tax to pay, which would reduce the fiscal cost of MRIC. Those on a lower personal tax rate than the other country's company rate would increase the fiscal cost.

Second, if Australian companies were to alter their distribution policies, that would result in different levels of retentions, and therefore changes in the value of the firm and hence capital gains tax proceeds. Note that the estimates shown assume that capital gains tax (CGT) applies on an accruals basis (in effect that retentions are taxed at the CGT rate), whereas in fact CGT is payable only upon realisation of the gain. Thus the CGT-inclusive estimates include maximum allowance for the effect of CGT (with the CGT-exclusive estimates making no allowance for CGT).

The data on the stock of trans-Tasman equity investment and on the two-way flow of dividends is taken from Statistics New Zealand (SNZ) and the Australian Bureau of Statistics (ABS). However, these data differ. Generally the data from the investment destination country's statistical agency shows larger amounts of investment from, and dividend flows to, the other (compared with the corresponding data from the source country's statistical agency). Given these differences, estimates of the fiscal costs are shown on the basis of each set of source data.

Finally, as noted, the estimates are static. In particular, no allowance is made for:

- The extent to which MRIC would result in induced reallocations of investment across the Tasman, or from third countries.
- How mutual recognition may cause a change in financing structures, with more equity, and less debt investment. However, there may not be much unwinding of existing financing structures, since replacing deductible interest with imputed dividends is broadly neutral for shareholders. But to the extent that there is change, there would be a shift in the country where tax is payable (tax on

⁷ This assumes that already accumulated retained earnings would be quarantined, such that MRIC would apply only in respect of future income.

interest mostly is payable in the country of the lender, whereas profits are taxed where they are earned).

Table F.7 Fiscal costs of mutual recognition for New Zealand^a

<i>The assumed use of MRIC credits is based on a range of distribution rates for FDI (as below), and existing actual distribution rates for FPI</i>	<i>SNZ data</i>	<i>ABS data</i>
<i>Assuming all shareholders on top tax rate of 33 percent</i>		
75% dividend distribution	135	185
50% dividend distribution	115	160
25% dividend distribution	100	125
If MRIC increased the FDI dividend distribution rate by 25%, the above cost estimates adjust by:	-9	-14
<i>Assuming a representative distribution of shareholder tax rates</i>		
75% dividend distribution	150	210
50% dividend distribution	130	180
25% dividend distribution	110	150
If MRIC increased the FDI dividend distribution rate by 25% points, the above cost estimates adjust by:	-1	-2
<i>Assuming all shareholders on capped Portfolio Investment Entity rate of 28c:</i>		
75% dividend distribution	160	220
50% dividend distribution	140	190
25% dividend distribution	120	155
If MRIC increased the FDI dividend distribution rate by 25% points, the above cost estimates adjust by:	+2	+3

^a Based on five year average of total New Zealand equity investment in Australia from 2007-2011, and the Australian 30 percent company tax rate. All figures are in \$NZ million.

Table F.8 Fiscal costs of mutual recognition for Australia^a

<i>The assumed use of MRIC credits is based on a range of distribution rates for FDI (as below), and existing actual distribution rates for FPI</i>	<i>ABS data</i>	<i>SNZ data</i>
<i>Assuming all shareholders on top tax rate of 45c</i>		
75% dividend distribution	555	745
50% dividend distribution	370	510
25% dividend distribution	190	275
If MRIC increased the FDI dividend distribution rate by 25%, the above cost estimates adjust by:		
Or allowing for CGT (on an accrual basis):	-99	-128
	+69	-90
<i>Assuming a distribution of shareholder tax rates</i>		
75% dividend distribution	615	830
50% dividend distribution	415	570
25% dividend distribution	215	305
If MRIC increased the dividend distribution rate by 25% points, the above cost estimates adjust by:		
Or, allowing for CGT (on an accrual basis):	-25	-35
	-93	+118
<i>Assuming all shareholders are super funds on a rate of 15%:</i>		
75% dividend distribution	750	1015
50% dividend distribution	510	695
25% dividend distribution	260	375
If MRIC increased the dividend distribution rate by 25% points, the above cost estimates adjust by:		
Or, allowing for CGT (on an accrual basis):	+135	+175
	+210	+272

^a Based on five year average of total Australian investment in New Zealand from 2007-2011, and the New Zealand 28 percent company tax rate. All figures are in \$NZ million.

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