

**DOUBLE TAX AGREEMENTS AND THE ARM'S
LENGTH PRINCIPLE: THE SAFE HARBOUR RATIO
IN NEW ZEALAND'S THIN CAPITALISATION RULES**

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Double Tax Agreements and the Arm's Length Principle:
The Safe Harbour Ratio In New Zealand's Thin Capitalisation Rules

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1. INTRODUCTION

The opportunities for international tax avoidance through the shifting of profits between jurisdictions is increasing as the world's economy becomes more integrated. While transfer pricing has been the primary method for multinationals to shift profits, thin capitalisation arrangements have been seen by some multinationals as an alternative as transfer pricing practices have become subject to greater scrutiny by revenue authorities. As a result many OECD members have over the last decade introduced specific rules to deal with thin capitalisation arrangements.

New Zealand introduced thin capitalisation rules (along with revised transfer pricing rules) in 1995. At the time of their introduction there was no consideration of any kind as to the relationship between these new thin capitalisation rules and New Zealand's existing DTA obligations. This omission is notable given that existing DTA obligations could override the new thin capitalisation rules or instead the new rules could potentially override existing DTA obligations. The objective of this article is to review New Zealand's thin capitalisation rules enacted in 1995 to determine whether they can be considered consistent with the arm's length principle found in New Zealand's DTAs.

2. THIN CAPITALISATION, DTAS & THE ARM'S LENGTH PRINCIPLE

As DTAs do not impose taxation in their own right, thin capitalisation rules are inevitably a domestic enactment of a contracting state. As domestic thin capitalisation rules have cross-border impact, the issue of the relationship of such domestic enactments and DTAs is important.

Double tax agreements (whether consistent with the OECD *Model Tax Convention* or not) almost invariably contain articles that require a Contracting State to tax associated enterprises controlled by a resident of the other Contracting State as if they were trading on an arm's length basis. Thus, revenue authorities of one Contracting State are limited to adjusting the profits of an associated enterprise from the other Contracting State only if transactions have taken place between the two enterprises on terms that are not commensurate with those charged to independent parties in similar transactions. This principle has been widely accepted as the appropriate basis for taxing associated enterprises and to the application of domestic transfer pricing rules of a Contracting State.

The key issue is, whether a domestic anti-avoidance provision such as thin capitalisation rules, that apply only to non-residents could conflict with obligations arising under DTAs. If a conflict does arise, either the domestic thin capitalisation rules could be overridden, or in jurisdictions where the Doctrine of Parliamentary Sovereignty applies (such as New Zealand¹) there is a risk that the domestic thin capitalisation rules could be upheld and existing DTA obligations overridden.²

The relationship between domestic thin capitalisation rules and DTAs has been considered by the Fiscal Committee of the OECD, resulting in their publication of a report on thin capitalisation³ in 1987. In this report, the Fiscal Committee of the OECD identified several articles of the OECD *Model Tax Convention* that were relevant to domestic thin capitalisation rules. They included Article 9 (Associated Enterprises), Article 10 (Dividends), Article 11 (Interest) and Article 24 (Non-Discrimination).

Of these four, Article 9, the Associated Enterprises Article, is the most important. It reads:

1. Where

- (a) an enterprise of a Contracting State participates directly or indirectly in the management, control or capital of an enterprise of the other Contracting State, or
- (b) the same persons participate directly or indirectly in the management, control or capital of an enterprise of a Contracting State and an enterprise of the other Contracting State,

and in either case conditions are made or imposed between the two enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profits which would, but for those conditions, have accrued to one of the enterprises, but, by reason of those

¹ The Doctrine also applies in Australia, Canada, Great Britain and other Commonwealth countries. (A similar doctrine also applies in the United States.) It is based on the principle that Parliament is sovereign and cannot bind itself in the future by earlier enactments including international treaties. Under the Doctrine a treaty override is not automatic and is dependent upon whether the subsequent domestic enactment was specifically intended to overrule the treaty provision. British courts presume that Parliament intends to fulfil, rather than breach, its treaty obligations and will only allow an override where it was clearly intended by Parliament to override an existing treaty. Refer Rigby, M., "A Critique of Double Tax Treaties as a Jurisdictional Coordination Mechanism", *Australian Tax Forum*, Vol. 8 (1991), pp.301-427, at pp. 313-17.

² Section BH 1 of the Income Tax Act 1994 provides the means by which a DTA can be ratified by Order in Council into New Zealand domestic law for income tax purposes. Under section BH 1(3) once a DTA is so ratified it "has effect in relation to income tax and unpaid tax notwithstanding anything in this Act or in any other enactment" –BH 1(3).

³ OECD Committee on Fiscal Affairs, *Issues in International Taxation No. 2 –Thin Capitalisation and Taxation of Entertainers, Artistes and Sportsmen*, OECD, Paris 1987.

conditions, have not so accrued, may be included in the profits of that enterprise and taxed accordingly.

2. *(omitted) [This paragraph covers mutual adjustment procedures when an adjustment is made under paragraph (1).]*

As a result of their 1987 report on thin capitalisation, amendments were made to the Commentaries to the *Model Tax Convention*⁴ in 1990. These amendments will have some bearing on how the Associated Enterprises Article will be interpreted with respect to thin capitalisation rules in the future.

The OECD believes that the Associate Enterprises Article is relevant to domestic thin capitalisation rules. Paragraph 3.0 of the Commentary on Article 9 reads (as at April 2000):

As discussed in the Committee on Fiscal Affairs' Report on Thin Capitalisation, there is an interplay between tax treaties and domestic rules on thin capitalisation relevant to the scope of the Article. The Committee considers that:

- (a) the Article does not prevent the application of national rules on thin capitalisation insofar as their effect is to assimilate the profits of the borrower to an amount corresponding to the profits which would have accrued in an arm's length situation;
- (b) the Article is relevant not only in determining whether the rate of interest provided for in a loan contract is an arm's length rate, but also whether a prima facie loan can be regarded as a loan or some other kind of payment, in particular a contribution to equity capital;
- (c) the application of rules designed to deal with thin capitalisation should normally not have the effect of increasing the taxable profits of the relevant domestic enterprise to more than the arm's length profit, and that this principle should be followed in applying existing tax treaties.

With (c), the committee believes that profits of a thinly capitalised company should not be increased beyond an arm's length profit. There is no guidance provided as how this arm's length profit is to be calculated, but it appears it is to be calculated assuming that some of the related-party debt is equity capital, so that the enterprise has a debt-to-equity ratio commensurate with other enterprises financed on an arm's length basis. Thus, the amount of deductible interest would be reduced with a corresponding increase in taxable income.

While simple in theory, to apply the arm's length principle in practice requires the identification of suitable arm's length comparables (known as "comparable uncontrolled prices" or CUPs). This is often difficult because for many types of transaction no suitable

⁴ *Model Tax Convention on Income and Capital*, OECD, Paris, (Loose-leaf service).

CUPs exist. The OECD in their 1979 report on transfer pricing and multinational enterprises⁵ while recognising the desirability of using CUPs, concluded that using CUPs could often be difficult to apply in practice. For this reason, a number of alternative methods have been developed to approximate appropriate CUPs for products or services not otherwise sold to non-controlled (independent) parties for applying transfer pricing rules.⁶

In the case of thin capitalisation it is likely that arm's length debt-to-equity ratios of comparable enterprises will be easier to obtain than appropriate CUPs for transfer pricing investigations, given that debt-to-equity ratios can be simply calculated from companies' financial statements. Beyond that, however, an analysis of comparables (whether for thin capitalisation or transfer pricing) will produce a range of suitable CUPs rather one specific figure. The issue then arising is which point from a range of CUPs can be taken as the appropriate one for pricing a non-arm's length transaction?

The Fiscal Committee of the OECD in *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations*⁷ states:

...because transfer pricing is not an exact science, there will also be many occasions when the application of the most appropriate method or methods produces a range of figures all of which are relatively equally reliable. In these cases, differences in the figures that comprise the range may be caused by the fact that in general the application of the arm's length principle only produces an approximation of conditions that would have been established between independent enterprises. It is also possible that the different points in a range represent the fact that independent enterprises engaged in comparable transactions under comparable circumstances may not establish exactly the same price for the transaction.⁸

Furthermore, if an analysis of CUPs provides a wide range of values, can a figure at the extreme end of the CUP range be used as an appropriate benchmark for a transaction with an associated enterprise? The OECD suggests that outliers from a range of arm's length values can be disregarded:

Where the application of one or more methods produces a range of figures, a substantial deviation among points in that range may indicate that the data used in establishing some of the points may not be as reliable as the data used to establish the other points in the range or that the deviation may result from features of the

⁵ OECD Committee on Fiscal Affairs, Paris, France, 1979.

⁶ These include the resale price method, the cost plus method, and the functional analysis method.

⁷ OECD, Paris, 2001.

⁸ *Ibid*, para. 1.45, page I-19.

comparable data that require adjustments. In such cases, further analysis of those points may be necessary to evaluate their suitability for inclusion in any arm's length range.⁹

In the *Transfer Pricing Guidelines*¹⁰, the OECD advocated that, if a relevant condition of a controlled transaction fell outside the arm's length range, "the taxpayer should have the opportunity to present arguments that the conditions of the transaction satisfy the arm's length principle, and that the arm's length range includes their results".¹¹

A further complicating factor when determining appropriate arm's length values for related-party transactions using CUPs, is that the CUPs obtained may vary significantly between years reflecting specific economic conditions in that industry and the business cycle. The OECD does not provide any specific guidance as to how such variations should be dealt with except to say "it generally might be useful to examine data from the year under examination and prior years."¹²

3. NEW ZEALAND'S THIN CAPITALISATION RULES

New Zealand's thin capitalisation rules were enacted in 1995 taking effect from the 1996/97 income year starting on 1 April 1996. The rules were enacted after the New Zealand Government had issued a discussion document titled *International Tax – A Discussion Document*¹³ containing detailed proposals for the new thin capitalisation rules and revised transfer pricing rules. The reason for the introduction of the thin capitalisation rules then was to complement new transfer pricing rules being enacted at the same time. It was believed that the absence of any formal thin capitalisation rules when the new transfer pricing rules were being introduced, could give rise to opportunities for tax avoidance and also create uncertainty in the minds of foreign investors as to New Zealand's stance on thin capitalisation. It was believed that clarity of the tax policy and taxing regime as it affected non-resident investors was essential to promote foreign investment in New Zealand.

⁹ *Ibid*, para 1.47, pages I-19-20.

¹⁰ *Ibid*.

¹¹ *Ibid*, para 1.48, page I-20.

¹² *Ibid*, para 1.49, page I-20.

¹³ Rt Hon W Birch, Minister of Finance and Hon W Creech, Minister of Revenue, Wellington, New Zealand, March 1995.

The OECD in its 1987 report on thin capitalisation¹⁴ classified thin capitalisation rules into two categories –fixed and flexible.¹⁵ The thin capitalisation rules enacted in most OECD countries are of a “fixed” type. New Zealand’s thin capitalisation rules, however, differ in that they contain features of both the “fixed” and “flexible” approaches, although they cannot be predicated to be totally “flexible” based on the OECD definition.

A key feature of the New Zealand rules is a safe-harbour debt percentage of 75%. This can be regarded as the fixed component of the rules. In addition, there is a provision that allows taxpayers to maintain a debt percentage above 75% without suffering any penalty under the rules, if the worldwide group of which the New Zealand taxpayer is a part, also has a debt percentage above 75%. This can be regarded as “flexible” because it takes into account the individual circumstances of taxpayers. It cannot be said that the New Zealand rules are fully flexible, as they take into account only one aspect of the taxpayer’s circumstances. It does not, more importantly, directly take into account the arm’s length principle.

A. Key Features of New Zealand’s Thin Capitalisation Rules

To determine if the New Zealand thin capitalisation rules apply to a taxpayer resulting in an apportionment of interest expense claimed [i.e. a disallowance of a deduction for a certain proportion of interest under section DD 1(b) of the Income Tax Act 1994 (ITA)], a two-step process must be applied. Firstly, the taxpayer must fall within one of three ownership tests specified in section FG 2(1). Secondly, if the “New Zealand group debt percentage” of the taxpayer exceeds the levels specified in section FG 3, only then will an apportionment of interest occur under section FG 8. If only one of these two tests is satisfied, there is no interest apportionment.

B. The Ownership Test

Under section FG 2(1) the rules apply to any person who *at any stage* during the income year falls within one of the following categories:

¹⁴ *Ibid.*

¹⁵ Fixed thin capitalisation rules specify a fixed debt/equity ratio and if a non-resident controlled taxpayer operates above that limit, then an adjustment will apply under that country’s thin capitalisation rules. There is no provision for the taxpayer to have their individual circumstances taken into account. Flexible thin capitalisation rules, on the other hand, are able to take into account individual taxpayers’ own circumstances. The OECD expressed a preference for flexible rules, probably to accommodate their finding that any domestic thin capitalisation rules must be consistent with the arm’s length principle.

- (i) a non-resident.¹⁶ This covers branches of non-resident companies, non-resident individuals and partners.
- (ii) a New Zealand resident company, where a non-resident person has a 50% or greater “ownership interest”¹⁷ in the company or control of the company “by any other means whatsoever”.¹⁸ This brings New Zealand resident companies with non-resident shareholders within the ambit of the thin capitalisation rules.
- (iii) a trustee of a non-qualifying trust¹⁹ 50% or more settled by a single, non-resident person.²⁰

C. The Debt Percentage Test

If a taxpayer meets one of the ownership tests, the interest apportionment formula in section FG 8 will apply depending upon the debt percentage of the taxpayer. This depends upon whether the taxpayer’s “New Zealand debt percentage” exceeds the greater of the safe-harbour 75% limit or 110% of the “worldwide group debt percentage” of the group to which they belong.²¹

A taxpayer’s “group debt percentage” is defined as the proportion of total interest-bearing debt²² over the total assets of the taxpayer’s New Zealand group for the income year.²³ Thus

¹⁶ Unless the taxpayer is a company in which a New Zealand resident person has a 50% or greater ownership interest and no non-resident (when aggregated with any associated persons) has a 50% or greater interest in the taxpayer -per section FG 2(1)(a).

¹⁷ A person’s “ownership interest” is the sum of all direct and indirect ownership interests held by a person in a company, plus the direct and indirect ownership interests held by persons associated with that person. (Section FG 2(2). “Associated persons” are defined in section OD 7.) A taxpayer’s “direct ownership interest” is determined by taking the highest percentage of the four tests in section CG 4(4)(a)-(d). These four tests are the (a) percentage of capital; (b) percentage of rights to vote or to participate in certain decision making with regarding to the management or operation of the company; (c) percentage of entitlement to company income; and (d) percentage of entitlement to the company’s net assets upon winding up.

¹⁸ Section FG 2(1)(b). The ownership of companies is determined using a concept of “ownership interest” which applies only to this Subpart of the Act. It is very similar to the “control interest” tests used in the Controlled Foreign Company (CFC) regime (Subpart CG of the ITA.)

¹⁹ Defined in section OB 1.

²⁰ Section FG 2(1)(c). Under section FG 2(7) a trust will be treated as being settled 50% or more if the total value of all settlements by one non-resident person (including those of associated persons) exceeds 50% or more of all settlements on the trust.

²¹ Section FG 3. The 110% rule only applies to companies and trusts and not to individuals - section FG 3(b).

²² Being “financial arrangements” which provide capital to the taxpayer (or another group member) and for which interest deductions have been permitted other than for foreign exchange variations –section FG 4(2).

²³ Section FG 4(1). Under section FG 4(5) the taxpayer has an option at what point during an

interest-free loans will be excluded and are essentially treated as equity, as will accrual accounting provisions, deferred tax and other similar liabilities or provisions. A deduction is allowed from the amount of total debt for any funds lent (at interest) by the taxpayer to all non-associated persons and associated non-resident persons.²⁴ As a result, financial institutions and financing subsidiaries with high debt/equity ratios are unlikely to be subject to penalties under these thin capitalisation rules.

The rules for calculating the “worldwide group debt percentage” are contained in section FG 5. This percentage is to be calculated at the end of the accounting year ending prior to the beginning of the fiscal (income) year for the New Zealand group.²⁵ Taxpayers have an option as to how the percentage can be calculated. They can use amounts taken from the financial statements of the taxpayer’s worldwide group,²⁶ provided the debt and assets are calculated pursuant to appropriate financial accounting standards.

The safe-harbour 75% “debt percentage” is equivalent to a 3:1 debt/equity ratio. The safe-harbour debt percentage provision is designed to reduce compliance costs for taxpayers who operate with moderate levels of debt. While this 75% safe-harbour “debt percentage” appears comparable to the safe-harbour debt/equity ratios adopted in the Canadian, Japanese and German thin capitalisation rules, the New Zealand debt percentage is effectively lower, because these other countries’ ratios take into account only related-party interest-bearing debt, while the New Zealand debt percentage takes into account all interest-bearing debt.

D. Interest Apportionment & Denied Interest Deduction

If a taxpayer falls within one of the three limbs of section FG 2(1) and has a “New Zealand group debt percentage” in excess of the limits specified in FG 3, under section FG 8(1) any interest expense claimed under section DD (1)(b)²⁷ as a deduction for tax purposes is *reduced* by the amount calculated under the following formula:

$$(I - GI - IFD) \times \frac{TNZD - NZDA}{TNZD} \times \frac{NZDP - TDP}{NZDP}$$

income year the debt percentage must be calculated. They are: (i) at the end of each day of the income year; or (ii) at the end of each 3-month period; or (iii) at the end of the income year.

²⁴ Section FG 6.

²⁵ FG 5(1).

²⁶ FG 5(2).

²⁷ This provision specifies the rules for interest deductibility.

- I = Interest that would be otherwise deductible (including foreign exchange gains/losses); and
- GI = Interest payable on inter-company balances excluded under consolidation accounting; and
- IFD = Deductible foreign exchange gains/losses arising on non-interest bearing debt excluded under FG 4(2).
- TNZD = Total NZ group debt, before exclusion of funds on-lent under FG 6.
- NZDA = Amount of funds on-lent under FG 6.
- NZDP = Taxpayer's NZ group debt percentage for the income year, being the percentage of total debt over total assets.
- TDP = For companies or trusts it is the greater of 75% or 110% of the taxpayer's worldwide group debt percentage; and in all other cases it is 75%.

Any interest deduction disallowed under the above formula is not reclassified as a dividend. Nor can any amount disallowed be carried forward and deducted in a subsequent year if the taxpayer's debt percentage falls below the specified safe-harbour levels. There is also no adjustment allowed under the above formula for any minority interests held by New Zealand residents.

4. NEW ZEALAND'S THIN CAPITALISATION RULES AND THE ARM'S LENGTH PRINCIPLE

A. Theoretical Analysis

When the New Zealand Government first issued the discussion document²⁸ on the proposed thin capitalisation rules, it was notable that there was no consideration in the document of the relationship between New Zealand's existing DTA network and the proposed thin capitalisation rules. Nor was there any reference made to the work the OECD had undertaken on thin capitalisation including the revised Commentaries to the Model Convention applying to thin capitalisation.

Prima facie, some features of the New Zealand thin capitalisation rules appear inconsistent with the arm's length principle. The OECD "generally accepts" that the Associated Enterprises article (the arm's length principle) is relevant to domestic thin capitalisation rules.²⁹ This appears to be on the grounds that thin capitalisation is only of concern when it is

²⁸ *International Tax – A Discussion Document, ibid.*

²⁹ *Ibid*, at page 21, paragraph 48.

a type of tax avoidance arrangement where excessive interest is being paid between related parties and that the inter-company debt upon which the interest is payable could be regarded as a disguised equity contribution. The New Zealand rules, however, apply all interest-bearing debt whether or not the loans upon which the interest is paid are ones between associated parties. Neither is there any requirement to identify and/or separate arm's length and related-party loans. Consequently there is no identification or review of any loans between related parties to determine whether they have been made on non-arm's length terms, as is required under the Associated Enterprises Article of virtually all DTAs. Taxpayers who suffer an apportionment of their deductible interest under the New Zealand rules, could therefore have grounds for arguing that the rules are not consistent with the arm's length principle.

Another issue arising under the New Zealand rules is that interest paid to arm's length lenders could be disallowed as a deduction. While this issue appears one to which the Associated Enterprises Article would not apply (as the loan is not from an associated party), such treatment would prima facie appear to conflict with non-discrimination articles found in a number of New Zealand's DTAs, as New Zealand controlled entities would not face such penalties in the same situation.³⁰

It could be argued that the two-limb safe-harbour provision of the New Zealand rules (i.e. 75% or 110% of the taxpayer's worldwide debt percentage) is sufficient to contend that consideration is being given to the arm's length principle. That argument, however, is questionable because the Associated Enterprises Article requires identification of specific transactions between associated enterprises. This is not required under the New Zealand thin capitalisation rules for apportionment of deductible interest to occur. The OECD does state, however, that a fixed-ratio thin capitalisation rule with provision for taxpayers to obtain specific approval for a higher ratio would be sufficiently flexible and consistent with the arm's length principle.³¹ While it could be argued that the 110% worldwide debt percentage provision in the New Zealand rules meets these requirements, it permits flexibility in respect

³⁰ Of those New Zealand DTAs that contain a non-discrimination article, most include an additional paragraph not found in the non-discrimination article in the OECD Model Tax Convention. This additional paragraph allows for "reasonably designed anti-avoidance provisions" targeted at non-residents only to not constitute discrimination for the purposes of the article.

³¹ *Ibid*, at page 31, paragraph 79.

of one criterion only. It is doubtful whether this would be adequate for the OECD's purposes. It may, however, in practice reduce the scope for a conflict to arise between New Zealand's rules and DTA obligations in respect of the Associated Enterprises Article.

B. Empirical Study

To test whether the thin capitalisation rules enacted in New Zealand can be regarded as consistent with the arm's length principle, a survey was made of major New Zealand listed public companies (RCCs) and a sample of New Zealand-resident companies controlled by non-resident shareholders (NRCCs) to determine if: (i) the debt percentages of the non-resident controlled companies would be likely to be affected by New Zealand's thin capitalisation rules and (ii) whether the safe-harbour ratio found within the rules can be said to be commensurate with the arm's length principle, using as a reference point the actual percentages found in resident listed companies.

The data used in this study comes from publicly available sources. Data for New Zealand public companies has been obtained from financial statements issued by the companies. Data for non-resident controlled New Zealand resident companies (almost invariably non-listed) has been taken from annual returns filed at the Companies Office. There were 922 firm-year observations for RCCs and 1,177 for NRCCs, spanning the years 1983-1992.

There are some major limitations in using these sources for data. Under both the New Zealand accounting standards in force during the period under review and the disclosure requirements of the Companies Act 1955, there was no requirement to disclose the amount of interest-bearing debt, making it difficult to directly calculate a company's debt percentage for the purposes of the thin capitalisation rules. It was necessary, therefore, to create two proxies for interest-bearing debt using information disclosed in the accounts. They are:

- (1) Interest-Bearing Debt = Total Term Liabilities + Bank Overdraft + Current Portion of Term Loan.
(Current Liabilities except any overdraft, including those payable to related parties, have been ignored on the assumption that they are not interest-bearing.)
- (2) Interest-Bearing Debt = Gross Interest Expense divided by an Interest Rate, but not more than the aggregate of Total Term and Current Liabilities. The results reported

here use a fixed interest rate of 13%.³² This proxy avoids picking up non-interest bearing liabilities, but using interest expense means that it captures the average debt during the year rather than the debt at the balance date.

Several figures could be chosen for Total Assets. As reported, many firms had revalued fixed assets, and many firms reported significant amounts of intangible assets (typically goodwill). Since section FG 5 allows the assets to be calculated according to appropriate financial reporting standards, the figures used here are based on total assets as actually reported. Higher debt/assets ratios, of course, would be obtained by including only tangible assets and valuing them at historical cost.

For the objectives of this study, two variables are of interest. The first is NZDP, the ratio of Interest-Bearing Debt (using one of the proxies) to Total Assets. The second is ND, the proportion of interest expense that would be non-deductible because of any thin capitalisation:

$$ND = \frac{TNZD/TA - 0.75}{TNZD/TA}$$

where TA is Total Assets. In this formula, if ND would be negative (if TNZD is less than 75% of TA), then ND is to be taken as zero, since no interest deduction would be disallowed because of thin capitalisation. The Debt to Total Assets ratio TNZD/TA and the non-deductible proportion ND are closely related, as illustrated in Figure 1.

---INSERT FIGURE 1 HERE---

Descriptive statistics for non-resident controlled companies (NRCCs) and resident-controlled ones (RCCs) using the first proxy for interest-bearing debt are shown in the following table:

---INSERT TABLE 1 HERE---

³² While the selected interest rate appears high in terms of current interest rates, in the period under review New Zealand had very high nominal interest rates and the rate of 13% would be considered reasonable at the time. The rate was chosen with that fact in mind, and because it made the results for RCCs match quite closely using the two different proxies. As will be discussed later, the results are not qualitatively different if a lower interest rate is used.

The mean and median levels of interest-bearing debt and of non-deductible interest are considerably less for NRCCs than for RCCs over the period studied. In fact, 23.2% of the NRCCs had no debt and 97.4% of them fell below the safe-harbour limit, compared to 13.7% and 97.0% for the RCCs. Assuming that NRCCs wished to minimise their New Zealand tax liability, it could have been expected that they would have a higher debt percentage than RCCs. This conclusion, however, needs to be considered in the light that other avoidance opportunities existed such as the use of manipulated transfer prices.³³

A study by Smith and Dunmore (1997)³⁴ using the same data set produced results that suggested NRCCs were financed with less equity than RCCs (the opposite of what the results in Table 1 suggest), but that the NRCCs' debt was less likely to be from term liabilities (presumably interest-bearing) in favour of current liabilities, primarily from related parties. This current account financing from related parties is assumed to be non-interest bearing, and thus does not count as debt for the purposes of the thin capitalisation rules. This explains why, using the first proxy for interest-bearing debt, NRCCs have lower debt percentages than do RCCs despite having less equity.

Table 2 compares the mean and median debt/asset ratios and the proportion of firms for which ND is not zero, for both NRCCs and RCCs in each year during the study period. Table 2 shows that the mean and median debt/assets ratio was less for NRCCs than for RCCs in every year of the period. The proportion of firms falling outside the safe-harbour limit was only about 1% for NRCCs from 1983-86, compared to a range of 3-5% for RCCs; however, in 1987 the proportion for NRCCs rose abruptly to be about the same as for RCCs for the period 1987-1992.

---INSERT TABLE 2 HERE---

Tables 3 and 4 repeat the analysis of Tables 1 and 2, but using the second proxy for interest-bearing debt (based on interest expense). For RCCs, the proportion of interest-bearing debt

³³ During the period under review New Zealand's transfer pricing rules were very weak [refer Smith and Dunmore (1997)]. NRCCs may have preferred to have used manipulated transfer prices rather than thin capitalisation arrangements because of their relative invisibility. This view is consistent with that taken by Smith and Dunmore (1997).

³⁴ Smith, A M C and P V Dunmore, "Tax Avoidance and the Financial Structures of Non-Resident Controlled Companies in New Zealand", *Australian Tax Forum*, Vol 13, #3, 1997, pp 277-309.

and the proportion of firms above the safe-harbour limit are similar for this proxy and for the first one. The proportions for NRCCs, however, are much higher using this proxy, particularly from 1986-1992. Table 4 is consistent with Table 2 in showing that the mean and median debt/assets ratio is lower for NRCCs than for RCCs in almost every year; however, the proportion of firms with debt above the safe-harbour limit is higher for NRCC firms in almost every year, and much higher from 1987-1992. If a lower interest rate is used in computing this proxy, estimated debt levels are higher for both RCCs and NRCCs; however, the increase is greater for NRCCs. The mean and median ratios of NRCCs and RCCs are brought closer together, but an even higher proportion of NRCC firms have debt above the safe-harbour limit. Thus, the broad conclusions are not affected by using a lower interest rate.

---INSERT TABLE 3 HERE---

---INSERT TABLE 4 HERE---

Some comment is needed on how to resolve the inconsistency between these results. As previously noted, there has been a tendency for NRCCs to be funded with relatively less equity and more current advances from related parties. Such advances were excluded in calculating the first proxy on the assumption that they were not interest-bearing. However, to the extent that they did bear interest, the second proxy would have captured these advances. Comparing Tables 2 and 4 suggests that the higher proportion of interest-bearing debt for NRCCs after 1986 using the second proxy represented roughly 10% of total assets. This suggests the extent to which related-party current advances were in fact interest-bearing in the late 1980s.

Comparing the percentage of firms having no debt as reported in Tables 1 and 3 reinforces this point. For RCCs, 13.7% of firms had no interest-bearing debt using the first proxy, and 12.1% using the second proxy. The difference, 1.6%, is the proportion of RCCs who appeared to have no interest-bearing debt on the balance sheet but who nevertheless had some interest expense. For the NRCCs, however, the corresponding difference is between 23.2% and 13.8%: that is, 9.4% of NRCCs had interest expense but no apparent interest-bearing debt on the balance sheet. This supports the interpretation that NRCCs are particularly likely to be funded with interest-bearing short-term advances from related parties, which are not picked up by the first proxy.

This analysis suggests that the second proxy is likely to give a better estimate of the amount of interest-bearing debt for NRCCs, while both proxies give about the same estimate for RCCs.

On that interpretation of the evidence, the results in Table 3 show that:

- NRCCs typically had less interest-bearing debt than RCCs did (the mean is slightly lower and the median is much lower for NRCCs); but
- A higher proportion of NRCCs had very high levels of interest-bearing debt (the proportion above the safe-harbour limit is 4.8% for NRCCs and only 2.0% for RCCs).

C. Analysis of Results

On a theoretical level New Zealand's thin capitalisation rules do not appear to be consistent with the arm's length principle. Theoretical inconsistency, however, does not lead to the rules being overridden by a DTA, nor an existing DTA being overridden by domestic thin capitalisation rules, as the arm's length principle has to be applied on an individual, case-by-case basis. Therefore an empirical study is likely to provide a better indication of whether New Zealand's domestic thin capitalisation rules are likely to conflict with DTA obligations (i.e. the arm's length principle) especially given that the New Zealand's rules contain a safe-harbour debt percentage.

The period reviewed (1983-1992) was one where the New Zealand thin capitalisation rules were not in force. In addition the transfer pricing rules in place during that period were very weak, providing NRCCs with substantial scope to avoid New Zealand taxes through that route. If the NRCCs had conducted a large part of their business with related parties, the use of manipulated transfer prices is more likely to have been favoured than thin capitalisation arrangements. The period chosen, however, is useful as it shows the debt percentages in existence without the influence of the safe-harbour debt percentage and the resulting "incentive effects" from such a percentage.

The results obtained show for the most part NRCCs in the period 1983-92 would not have been affected by the New Zealand thin capitalisation rules. This suggests that the safe-harbour ratio has been set at the more extreme end of the range of debt percentages obtained, potentially affecting only about 5% of NRCCs. That does not mean, however, that NRCCs

that are beyond the safe-harbour percentage cannot challenge under the Associated Enterprises Article the apportionment of deductible interest arising from the thin capitalisation rules. The debt percentage must still be compared to those debt percentages of similar firms that have obtained debt finance on arm's length terms. The small size of the New Zealand economy and the small number of potential comparables will not assist in applying the arm's length principle to cases involving thin capitalisation. However, the results in Table 3 show that the mean value of ND for NRCCs for which ND is positive (that is, falling outside the safe harbour) is 0.161: that is, on average for these firms, 16.1% of their interest would be non-deductible under the thin capitalisation rule. For RCCs, the corresponding figure is 0.192 or 19.2%. Thus it appears that even though more NRCCs have interest-bearing debt of more than 75% of their total assets, those NRCCs in this position do not tend to carry as much interest-bearing debt as RCCs in the same position. This suggests that NRCCs would usually be able to argue that their financing practices were comparable to those of resident firms, which have presumably financed themselves on an arms-length basis.

This article does not consider other matters arising in regard of the consistency of domestic thin capitalisation rules with other articles of existing double tax agreements. There remain risks that such rules could potentially conflict with the interest, dividend and non-discrimination articles of double tax agreements, although these risks are likely to be less than those arising with the Associated Enterprises Article.

5. CONCLUSION

Because thin capitalisation allows multinational enterprises to avoid tax in source countries, a number of countries have enacted thin capitalisation rules to limit such tax avoidance. As these rules are domestic enactments, if they are to be effective, they must be consistent with the arm's length principle in the associated enterprises articles of most double tax agreements.

The results suggest that, firstly, the safe-harbour debt percentage in the New Zealand thin capitalisation rules has been set at a level where relatively few NRCCs are likely to be affected by the rules. Secondly, NRCCs which exceed the safe-harbour percentage seem to finance themselves with levels of interest-bearing debt that are no greater than those used by resident firms, so that the entire thin-capitalisation regime may be incompatible with the

arm's length principle. Whether the safe-harbour debt-percentage has been set at too high a level so that insufficient protection is afforded to the New Zealand revenue is an issue to be considered given the results obtained here, however, the arm's length principle could place a major constraint on lowering that safe-harbour percentage.³⁵

³⁵ In a discussion document titled *Interest Deductions for Companies: A Government Discussion Document* issued in September 1999, it was proposed to introduce more liberal rules for corporate interest deductibility along with a reduction of the safe harbour debt percentage from 75% to 66%. When these proposals for corporate interest deductibility were enacted in 2001, the safe harbour debt percentage was left unchanged at 75%.

FIGURE 1: Non-deductible interest fraction ND as a function of Interest-Bearing Debt to Total Assets, 75% safe-harbour level

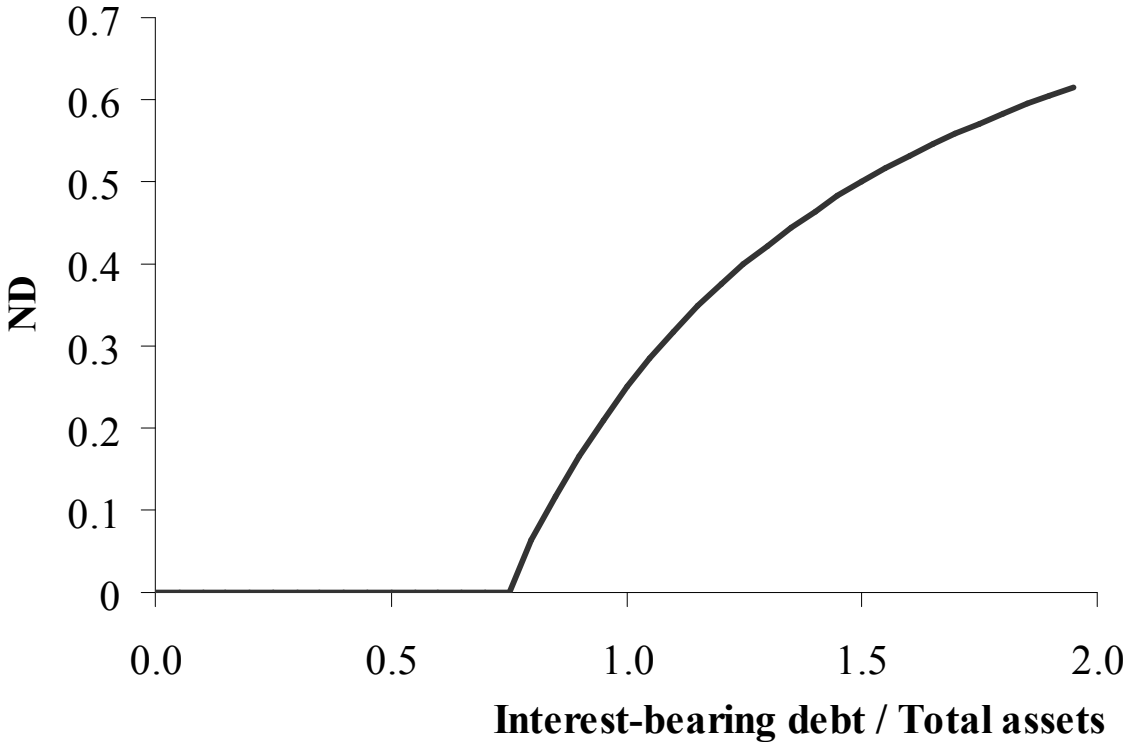


TABLE 1: Descriptive statistics of the Debt/Assets ratio (TNZD/TA) and the interest non-deductibility fraction (ND), using first proxy. NRCCs: Non-resident controlled companies. RCCs: resident companies.

	NRCCs		RCCs	
	TNZD/TA	ND	TNZD/TA	ND
Mean	0.16	0.004	0.26	0.006
Standard deviation	0.21	0.027	0.24	0.044
Minimum	0.00	0.000	0.00	0.000
Median	0.07	0.000	0.24	0.000
Maximum	1.28	0.416	2.93	0.744
% zero	23.2%	97.4%	13.7%	97.0%
% positive	76.8%	2.6%	86.3%	3.0%
Mean of positive cases	0.21	0.139	0.31	0.183
Number of firms	1177	1177	922	922

TABLE 2: Mean and median debt/assets ratio, and proportion of firms that fall outside the safe-harbour provisions, year by year for non-resident and resident controlled companies. Using first proxy for interest-bearing debt.

Year	Mean TNZD/TA		Median TNZD/TA		Proportion with ND > 0	
	NRCCs	RCCs	NRCCs	RCCs	NRCCs	RCCs
1983	0.14	0.24	0.08	0.21	1.0%	5.0%
1984	0.14	0.22	0.09	0.18	1.0%	3.8%
1985	0.16	0.25	0.10	0.23	1.0%	3.2%
1986	0.16	0.24	0.09	0.21	0.9%	4.5%
1987	0.15	0.23	0.06	0.19	3.3%	2.4%
1988	0.14	0.25	0.05	0.25	2.2%	0.9%
1989	0.15	0.28	0.04	0.26	3.5%	3.5%
1990	0.20	0.29	0.08	0.28	3.9%	4.8%
1991	0.18	0.28	0.07	0.29	3.4%	2.2%
1992	0.18	0.28	0.05	0.26	5.7%	2.2%

TABLE 3: Descriptive statistics of the Debt/Assets ratio (TNZD/TA) and the interest non-deductibility fraction (ND), using second proxy with a 13% interest rate. NRCCs: Non-resident controlled companies. RCCs: resident companies.

	NRCCs		RCCs	
	TNZD/TA	ND	TNZD/TA	ND
Mean	0.22	0.008	0.25	0.004
Standard deviation	0.26	0.044	0.24	0.037
Minimum	0.00	0.000	0.00	0.000
Median	0.12	0.000	0.23	0.000
Maximum	2.59	0.711	3.02	0.751
% zero	13.8%	95.2%	12.1%	98.0%
% positive	86.2%	4.8%	87.9%	2.0%
Mean of positive cases	0.26	0.161	0.29	0.192
Number of firms	1177	1177	922	922

TABLE 4: Mean and median debt/assets ratio, and proportion of firms that fall outside the safe-harbour provisions, year by year for non-resident and resident controlled companies. Using first proxy for interest-bearing debt with a 13% interest rate.

Year	Mean TNZD/TA		Median TNZD/TA		Disallowance fraction	
	NRCCs	RCCs	NRCCs	RCCs	NRCCs	RCCs
1983	0.15	0.23	0.09	0.21	1.0%	5.0%
1984	0.13	0.18	0.06	0.15	2.1%	0.0%
1985	0.18	0.21	0.08	0.19	2.9%	1.6%
1986	0.22	0.26	0.14	0.24	0.9%	3.0%
1987	0.23	0.23	0.10	0.22	6.6%	2.4%
1988	0.24	0.28	0.14	0.23	6.7%	2.8%
1989	0.24	0.29	0.17	0.27	6.3%	3.5%
1990	0.26	0.28	0.18	0.29	7.1%	2.4%
1991	0.26	0.27	0.20	0.28	5.5%	0.0%
1992	0.26	0.23	0.13	0.21	7.1%	0.7%