1. INTRODUCTION

This article is concerned with an analysis of aspects of taxation of international capital income. In the international setting withholding taxes are in general levied by governments on dividends, interest and royalties paid by domestic companies to non-resident investors in their shares, bonds and for the payment of services provided by foreign firms such as technical know-how. Our focus is on interest withholding tax (“IWT”) which is levied by the Australian government at a rate of 10 per cent on the gross amount of interest paid to overseas investors. However, exceptions to the IWT rule abound. For example, eurobonds are unencumbered by this tax, provided their issuance meets a simple public offer test. As a result, interest withholding tax revenue has declined steadily in relative terms over the last two decades. We commence with a delineation of international capital income and pay particular attention to the development of withholding taxes on interest payable on our foreign debt obligations. Next, the current and planned withholding tax rules are analysed. In the third part, we explain the economic rationale for withholding taxes, examine common attitudes towards international withholding taxes and provide evidence of the extent to which they are avoided. Part four deals with IWT, investment yields and exchange rates. The allocative and equity distortions resulting from the differential tax treatment of domestic and international investors are investigated next. Finally, we draw some conclusions from our findings for the current tax debate and point to future research.

2. INTERNATIONAL CAPITAL INCOME

Income from capital paid to (received from) non-residents is called international capital income. It consists of income from inward and outward foreign direct investment (“FDI”) and international portfolio investment. This breakdown, which is common in the economics literature, corresponds in broad terms with the terminology underlying the tax law where foreign sourced income is divided into active and passive income from controlled and non-controlled foreign companies. Income from equity investments by foreigners in Australian companies may either be retained or distributed as dividends. Likewise, income from borrowing from foreigners is received in the form of interest. Dividends and interest paid to non-residents attract, in general, withholding tax. A mirror image picture emerges for dividends and interest received from non-residents.

2.1 Australia’s Foreign Financial Obligations

Due to Australia’s status as a large debtor nation and persistent capital importing country, we are mainly concerned with the outflow of investment income to non-residents. The order of magnitude of
the flows involved is suggested by the following figures. During the September quarter of 1997 the accumulated foreign investment in Australia came to $533 billion of which gross foreign debt amounted to $316 billion.1 On this stock of foreign claims, we incurred the obligation to pay dividends, interest and accrued earnings to non-residents. Although retained and reinvested earnings do not leave Australia, they nonetheless accrue to foreigners. As foreign investment is ordinarily associated with the transfer of technology, patents, trademarks, management systems and the like, foreign investors receive royalties and fees as recompense for making these services available. Australians, of course, also invest overseas and lend to foreigners. The aggregated value of these claims on foreigners, which is called Australian investment abroad, stood at $208 billion in September 1997 of which our lending overseas amounted to $94 billion.

The interest bill on our gross foreign debt for the year up to the December quarter of 1997 amounted to $14.862 billion, implying an average interest rate of 4.85 per cent.2 How is this interest income, which accrues to non-residents, taxed? The Australian government levies, in principle, a final 10 per cent withholding tax on the gross interest payments to non-residents. In practice, numerous exemptions allow the majority of the interest to be paid free of withholding tax. For example, while a universally applied IWT of 10 per cent would have raised $1.4862 billion for the time period under consideration, less than half of this amount actually accrued as revenue to the government. In common with other countries’ experiences, revenue from withholding tax (interest and dividends) has been declining, prompting Gordon3 and Razin4 to doubt whether capital income taxation can survive in open economies.

The accompanying graph shows the downward trending ratio of the interest withholding tax collected on interest which we pay on our foreign debt to non-residents. Instead of 10 per cent the government only withheld 3.7 per cent of the interest paid to non-residents in 1996/97. The reasons for the falling trend in the collection ratio of withholding tax will be given later.

Withholding taxes are generally applied to gross income while ordinarily income taxes are levied on net income (after allowable deductions). For this reason the effective tax rate applicable to net income is higher than the stated rate whenever costs are incurred in the earning of gross income. If the associated expenses in earning gross income are large, even a relatively low rate of withholding tax translates into a much higher tax rate on net income. For example, if expenses absorb 80 per cent of gross interest income, which is quite realistic when securities are financed with borrowed funds, a 10 per cent withholding tax on gross income of $1,000 rises to 50 per cent of net income.5 The ultimate withholding tax burden depends on the tax credit available to the investor in the home country. Foreign expenses may or may not be deductible in the tax jurisdiction of the investor.

2 This average interest rate on our foreign debt consists of a weighted average of two components. First, the interest payments in Australian dollars on the market value of our foreign debt denominated in domestic dollars. Second, the interest payments in foreign currencies, converted into Australian dollars at the ruling exchange rates, on the foreign currency denominated external debt. The average level of the interest rate on our foreign debt thus depends positively on the contract interest rates, negatively on changes in the market values of the foreign debt and exchange rate changes. The interest paid as a % of Gross Foreign Debt in year t is computed as 100 x Interest paid in year t / {(GFDt + GFDt-1)/2} where GFD is the Gross Foreign Debt at end of year t. That is we have calculated the interest paid as a percentage of the average GFD for the year where we have assumed that the average GFD in a year is simply the average of the starting and ending levels of GFD in the year.
5 Prima facie, investing borrowed funds in foreign debt securities does not seem to be a very profitable proposition. However, the investor might expect an appreciation of the foreign currency or a fall in foreign interest rates, resulting in exchange rate and capital gains. Moreover, such cross-border investments are often undertaken for portfolio diversification reasons to reduce risk.
In the next section we examine the current and planned withholding tax rules.

3. WITHHOLDING TAX RULES RELATING TO INTEREST INCOME

In this part we examine the current tax rules, and their planned amendments, applying to withholding taxes on international capital income.\(^6\) Withholding tax is levied on a range of income, including dividends, interest income, royalties, rents, fees, etc. However, interest forms by far the largest component. It is taxed as follows:

As a general rule, interest derived by non-residents and paid by:

- residents is subject to a 10 per cent withholding tax regardless of whether the recipient is from a treaty or non-treaty country.\(^7\) The interest paid on a bond, issued by a domestic corporation, to its foreign holders outside Australia is an example where withholding tax is (still) payable;

- a non-resident when the interest is incurred in carrying on a business from a permanent establishment in Australia. This provision of the law applies typically to the interest payments by a foreign controlled company in Australia to its foreign multinational (parent) corporation.

Interest for withholding tax purposes is broadly defined to include payments “in the nature of interest”, amounts that have been paid in

\(^6\) Withholding taxes in the domestic context are primarily a prepayment of personal and corporation taxes.

\(^7\) A country that has a double tax agreement (“DTA”) with Australia is called a “treaty country”.

Legend: The outlier for the year 1995/96 was due to a single large payment of interest withholding tax received.
“substitution for” interest and interest received through “washing arrangements”. Before the introduction of this anti-avoidance broadened definition of interest, foreign holders of such bonds could avoid paying the tax by selling the bond to tax-exempt institutions before the coupon date and repurchasing the same bond just after the coupon date. This is known in the market as coupon washing.\(^8\) The obligation to withhold tax also applies to accrued interest. In all cases, interest withholding tax is a final tax on the gross amount of interest paid as far as the Australian tax authorities are concerned.

The following main exceptions apply or are planned:

- First, IWT is not levied on interest paid to non-resident holders of debentures (bonds, notes or bills) of domestic issuers provided the securities issued meet the requirement of the public offer test, are issued overseas and interest is paid outside of Australia. One public offer test (there are four alternatives) is satisfied when an Australian company offers its bonds to 10 banks or investment houses operating in an overseas financial market. This test is designed to exclude, as far as possible, the sale of bonds to resident investors operating overseas, say in the guise of a nominee company and to prevent direct lending by an overseas parent. Furthermore, direct sales to Australian residents are prohibited.

- Second, IWT is not levied on offshore government (Commonwealth, State and their respective authorities) bond issues. As well, domestically issued treasury notes are exempted from withholding tax.

- Third, non-residents who enjoy a tax-free status in their country of residence, eg US pension funds or foreign sovereigns, may apply to the Australian Taxation Office for withholding tax exemption.

- Fourth, offshore borrowings by Australian banks and foreign bank subsidiaries do not attract withholding tax, provided the public offer test is met. Branches of foreign banks are subject to IWT at a rate of 5 per cent. Foreign banks circumvent this regulation by conducting their borrowings through a non-bank subsidiary that can raise funds free of IWT. The Wallis Report castigates the tax discrimination against foreign bank branches:

  Such tax driven responses constrain competition, increase costs, create complexities for regulators and impede the efficiency of the capital market.\(^9\)

Interest paid by offshore banking units (“OBUs”) is also free from withholding tax.

The Australian government plans to remove withholding tax on interest paid to non-resident holders of domestically issued debt. This means that BHP would not be required to withhold tax on interest payments to foreigners who hold domestically issued bonds. When these changes are fully implemented, the economic base for withholding tax would virtually disappear.

We now explain the economic rationale for withholding taxes, examine the attitude of international investors to withholding taxes and provide evidence for the extent to which they are avoided.

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\(^8\) Coupon washing is not only confined to members of the private sector. According to The Economist, “A Waste of Tax” (1993) October 23 The Economist, central banks also use this technique to enhance their earnings from investments in foreign governments’ securities.

4. INTERNATIONAL INVESTORS AND WITHHOLDING TAXES

The bulk of international interest payments are from portfolio investment. Income from international portfolio investment is taxed on the basis of the residence principle, meaning that taxation of portfolio income occurs in the country of residence of the income recipient. As an exception to this rule, taxes withheld on interest payments to non-residents are subtracted at source (source principle), that is, in the country where they are generated.

There are two main reasons for this exception from the residence principle. First, payment of this withholding tax leaves an audit trail which assists in combating tax evasion with this kind of income. Second, an IWT allows a capital importing country (such as Australia) to capture at least part of the tax payable on interest income. A withholding tax permits a debtor country to export its taxation. Without this tax, the foreign taxation authorities would have the sole benefit of fully taxing the foreign interest income of its residents. When tax on interest payments is withheld and a tax credit is given in the investor’s country, the foreign taxation authority has to share the tax revenue with that of the country where the income originated. This appears to suggest that it would be in the interest of capital importing countries to raise rather than lower withholding taxes. However, the opposite appears to have occurred. The US abolished non-resident interest withholding taxation in 1984 at about the time when persistent current account deficits turned it from a creditor into a debtor country. Australia appears to be following along the same path and is gradually dismantling the withholding tax system. This poses the question: What are the reasons for this “race to the bottom”?

4.1 Investors

The main reason why capital importing countries increasingly abolish withholding taxes on interest payments to non-residents is that such a tax tends to diminish the investor base, resulting in increased borrowing costs. There are mainly three groups of investors affected by withholding taxes. First, some institutional investors, eg US pension funds, enjoy a tax-free status. Where they are unable to obtain an exemption, or claim a tax refund from their home tax authorities for taxes paid in a foreign country, withholding taxes reduce the yield on their investment. For obvious reasons they stay clear of securities issued with an IWT obligation.

Second, a large segment of the international investment community has no intention of paying tax on certain internationally issued securities; not even a 10 per cent withholding tax. Governments around the world turn a blind eye to such tax avoiders, hoping that their own citizens are not amongst them. Eurobonds are one of the categories of securities that aid international tax evasion.

Bonds may be issued in registered form as inscribed stock, (eg Australian bonds and debentures sold to residents), or as bearer instruments. The bearer form of international

10 The Australian Bureau of Statistics distinguishes broadly between foreign direct investment and portfolio investment. Foreign direct investment occurs when the foreign investor acquires 10 per cent or more of the voting shares of the target company. The remaining forms of foreign investment count as portfolio investment.
11 Taxation at source of income from foreign direct investment is commonly justified in terms of compensation for the infrastructure services (education, job training, law and order, roads, etc.) that host governments provide to foreign direct investors. A weaker case exists for source-based taxation of interest income from foreign (portfolio) debt capital. The imposition of an IWT is commonly justified as an anti-evasion measure.
12 Developing countries in particular benefit from withholding taxes. On the one hand such taxes do not appear to deter foreign investment in these countries; thus they do not deprive these countries of capital. On the other hand the debtor status of developing countries implies that interest and dividend payments are made to foreigners with no significant flow in the opposite direction as their own residents, on net, do not receive interest payments form abroad. Developing countries thus attempt to secure their fair share of the income they pay to foreigners.
bonds and other debt securities have certificates issued in physical form. This ensures that interest payments on such international debt securities are *de jure* exempted from withholding and *de facto* also from other taxes. These tax privileges are favoured by investors who cannot reclaim taxes withheld because they are not taxed such as US pension funds. These tax features are equally important for individuals who evade taxes in their home country and who do not want to be burdened by a withholding tax which is payable to a foreign tax authority. As a result international investors now regard the withholding tax-free status as an essential requirement. Indeed, there is no withholding tax at all in eurocapital markets, effectively encouraging tax avoidance. However, as the preferences for withholding tax-free securities could also be satisfied with inscribed stock, the bearer instrument appears to accommodate solely the requirements of tax evaders. Their popularity is otherwise difficult to understand in view of the fact that physical certificates entail significant transaction costs (custodial services, interest payments against coupons and risk of loss) as compared to inscribed stock.

As a rule, interest proceeds from investments in eurobonds are, of course, subject to the tax laws of the resident country. That is, a Japanese investor in US dollar bonds issued by the Australian government in London has to declare her interest income in Japan. However, the bearer form of most securities makes it very difficult for tax authorities to monitor the payment of interest and hence IWT.

A footnote to the tax issue is appropriate here. It demonstrates clearly the double standard that is applied to the taxing of securities in internal and external markets. The US *Tax Equity and Fiscal Responsibility Act 1982* (“TEFRA”) and the *Interest and Dividend Tax Compliance Act 1983* (“IDICA”) require that bonds be issued in registered form. The investment banking community, however, successfully lobbied the US Congress for eurobond issues to be exempted from this requirement. As a result, US borrowers may issue bearer eurobonds provided:

- they will not be bought and sold by US residents;
- interest on such bonds is paid outside the US; and
- such bonds bear a warning that US persons holding these bonds are subject to certain fiscal sanctions.

However, one may also interpret the US actions as a cave-in to the realities of international tax avoidance. According to Giovannini, 33 per cent of all US interest payments to foreigners before the implementation of this Act were channelled through the Netherlands Antilles because of a tax treaty between the two countries (zero withholding tax). As a result, the *Deficit Reduction Act 1984* exempted most interest payments to foreigners from withholding tax. As a consequence, US corporate bond issues jumped dramatically while issues through the Netherlands Antilles collapsed.

Non-resident investors insist on payment of interest without taxes having been withheld. If any proof of this was needed, it came from the howl of international protest which the Australian government’s announcement elicited at the beginning of July 1986 concerning the removal of exemption from this tax. By the end of July, the government was forced to rescind its decision “in order to fully restore the capacity of Australian borrowers to access funds in European, American and other markets”, as a press release stated. The German government experienced a similar response to the introduction of a withholding tax at the

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13 The bond certificates which commonly have a minimum value of US$1 000, are issued with detachable coupons, one for each coupon payment date. Neither the issuer nor the paying agent (usually a bank that arranges the payment) keeps a record of the holder or the beneficial owner of the bond. Legally, the holder of the bearer bond is presumed to be the owner.

14 Eurobonds and other instruments are usually held by bank depositories. Clearing, settlement and payment of bond trading occurs through Euroclear and CEDEL; settlement entails simply a transfer of title and it does not involve an exchange of physical certificates. The records of these depository banks and the two clearing agencies if they were to be made available to tax authorities, would provide a rich lode of information about tax evasion.

beginning of 1989 (foreshadowed in 1987). Domestic savers transferred funds subject to the withholding tax to foreign centres (mainly Luxembourg) and the demand for tax affected bonds fell rapidly. According to Schlesinger, domestic interest rates rose and the currency depreciated, forcing the government to abolish this tax in the spring of the same year.

The third group of foreign interest recipients comprise mainly multinational corporations that have lent funds to their controlled foreign subsidiaries. Even though the thin capitalisation rule prevents abusive income shifting from one tax jurisdiction to another, multinational corporations still appear to have sufficient scope to split up the operating income of their foreign affiliates into repatriated dividends, royalties, interest and income shifting through transfer pricing arrangements in response to tax changes as Grubert has shown.

4. 2 Measuring the Extent of IWT Avoidance

Any attempt at measuring the extent of IWT avoidance with any accuracy is doomed to failure. Its existence, however, is widely assumed in the literature. Huizinga, for instance, observes:

At present, a large part of international interest income appears to escape all income taxation.  

Though its precise measurement is impossible, global balance of payments statistics provide some indication of the magnitude of the problem. Interest payable to non-residents abroad enters the balance of payments as a debit and thus contributes to the debtor country’s current account deficit, whereas interest income receivable from abroad (a credit entry) is often not recorded in the recipient country’s balance sheet because tax evading recipients do not declare this income. As one country’s current account deficit equals another’s surplus, we would expect that all countries’ current account balances (and capital account balances) net to zero. The World Bank and the Bank for International Settlements have added up the current account deficits and surpluses of all countries and found to their surprise that the world is consistently running a global current account deficit. In fact, the negative discrepancy on current accounts for the period from 1980 to the present now runs into several hundreds of billions of dollars. An interesting article by Laney addresses the question of these missing billions. He canvasses a number of explanations, such as oil inventories held at sea and illegal traffic in drugs, but dismisses them as possible explanations for these imbalances. He observes that the negative current account balances are mainly due to the negative balance in “Net Income” in balance of payments, which includes payments of interest and dividends. Laney explains:

The negative discrepancy on investment income, which is less stable, has grown during the 1980s. The existence of a negative global balance here probably is traceable to the fact that payers of interest and dividends are larger and more identifiable than are the recipients. Those on the receiving end often are paid through intermediaries and may not be reporting income in order to avoid tax or exchange control.

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17 Thin capitalisation occurs when the foreign subsidiary is loaded up with debt relative to its equity base in order to obtain tax-deductible interest expenses which has the effect of disguising operating income which is then transferred (and taxed only at the IWT rate) to the parent or an affiliate in a low-tax country. The thin capitalisation rule mandates debt-equity ratios that cannot be exceeded.
21 Ibid 6.
The global current account discrepancy appears to be falling and rising in unison with fluctuations in interest rates. Whenever rates fall the scope for tax evasion appears to be appreciably reduced. A working party set up by the IMF\textsuperscript{22} to investigate this problem came to a similar conclusion.\textsuperscript{23}

### 5. WITHHOLDING TAXES, YIELDS AND EXCHANGE RATES

In the following discussion we consider the impact of withholding taxes on domestic and foreign interest rates and the exchange rate. We commence with the case where investors are able to evade paying tax with impunity.

#### 5.1 Withholding Taxes and Yields

Withholding tax is imposed at a flat rate and works as follows. Assume a Belgian investor is expected to receive a gross interest payment of $A100,000 on a 10 per cent coupon bond of $A1 million face value. Given a withholding tax of 10 per cent, $A10,000 of the interest payment are withheld by the Australian taxation authorities and only $A90,000 are passed on to the investor. Thus, the after-tax yield falls from 10 to 9 per cent. Obviously, an investor with no intention of reporting the income to the tax authorities would steer clear of securities which entail a tax obligation unless the pre-tax interest rate is grossed up by the full amount of the tax and the risk of detection is minimal. Huizinga\textsuperscript{24} and Gardner\textsuperscript{25} refer to research that appears to support this view, citing the German withholding tax experience in early 1989. At that time German corporate bond yields rose by the full amount of the tax and German nationals could hide their interest income from their tax authorities in banks, protected by legally codified bank secrecy. Recent research by Eijffinger, Huizinga and Lemmen\textsuperscript{26} suggests that yields on short and longer term government securities fully reflect withholding taxes imposed on American and Japanese investors. Such taxes, therefore, appear to be borne by borrowers and not investors.

However, when the interest income is declared for taxation purposes in Belgium, the investor would point out to his tax office the tax deduction by the Australian government. Provided a double tax agreement exists between both governments, the taxes withheld will be taken into account when the Belgian investor’s tax liabilities are calculated. However, the tax refund in the form of a tax credit is only received, say, after half a year. Therefore, its present value has to be calculated which is certainly lower than the amount withheld. Thus, even a tax honest investor requires a gross bond rate that is slightly above 10 per cent in order to ensure a 10 per cent rate net of the influence of withholding tax.

In order to simplify procedures we assume that a tax credit is given after half a year and continue with the case of the Belgian investor who bought a one year $A bond with a face value of $A1 million on which he required a 10 per cent interest net of withholding tax. The Australian tax authorities withhold 10 per cent of the interest paid to the investor. We now ask how much the Australian government has to adjust the interest rate so that the investor receives a 10 per cent rate net of the impact of the withholding tax. In other words, the Australian government would have to adjust the bond rate upwards in order to ensure that the interest payment minus the withholding tax plus the net present value of the withholding tax to be credited after half a year results in a net interest payment to the investor of $100,000.


\textsuperscript{23} However, it unearthed a further source of the discrepancy, namely official transfers. Debits reported by donor countries (foreign aid) exceed credits reported by the recipient countries by a stable and large margin. It appears that foreign aid payments often end up in undeclared bank accounts of private citizens in developing countries.


Let us call the unknown adjusted interest rate \( r' \) and set the required interest payment net of withholding tax equal to the actual net interest payment plus the discounted value of the refundable withholding tax, that is,

\[
$100,000 = $1m \ r' - 0.10($1m) \ r' + \frac{0.10($1m)\ r'}{1 + 0.12/2}
\]

The term on the left measures the net interest payment that the Belgium investor requires even though 10 per cent is withheld. The first term on the right gives the interest payment before adjusting for withholding tax. From this amount we have to subtract the withholding tax imposed at a rate of 10 per cent which gives us our second term. The last term on the right is the discounted value of the withholding tax which the investor receives after six months; this term has to be adjusted to suit the given circumstances. We assumed an implied 6 month forward rate of 12 per cent after one year. Solving the above equation for \( r' \) we obtain \( r' = 0.1005692 \) or 10.05692 per cent.

Thus, the investor demands a gross interest payment of $100,569 out of which 10 per cent or $10,057 is deducted as withholding tax, leaving a net interest payment of $90,512. The net present value of the withheld tax to be refunded after half a year, has to be added; it amounts to $9,488 (10,057/1.06) Thus, $90,512 plus $9,488 equals $100,000.

In other words the adjusted bond rate of \( r' = 0.1005692 \) ensures that the interest payment minus the withholding tax plus the net present value of the withholding tax to be refunded after half a year results in a net return of $100,000. The order of magnitude of the rise in the interest rate – about six basis points in our example – agrees with computations done by Robertson. She attempts to assess the expected reduction in Australian bond rates in case the interest withholding tax obligation is removed from domestically issued government and corporate bonds as foreshadowed by the government.

If the impact on domestic interest rates of the removal of withholding tax is limited to what appears to be the net present value of the delayed tax credit, international investors do not in general shirk their tax obligations on foreign sourced income in their home countries. This conclusion is not necessarily in conflict with the German evidence and the research by Eijffinger, Huizinga and Lemmen which assumed widespread tax evasion. The domestic issue of withholding tax-free corporate bonds almost certainly will be in the form of inscribed stock which virtually eliminates any possibility of tax evasion. While the planned tax changes will make the corporate bond market more attractive to investors in the long run, the current lack of liquidity in this market acts as a deterrent to international institutional investors. For this reason, the abolition of withholding tax on domestically issued corporate bonds will only have negligible consequences for government revenue. Obviously, the more withholding tax-free debt securities are taken up by foreigners, the greater the loss to government revenue.

The tax measures in support of the corporate bond market form part of the government’s strategy to enhance the status of Sydney as a world financial centre. The IWT exemption will presumably also apply to so-called Kangaroo bonds which are also denominated in Australian dollars, issued in Australia by foreign borrowers but are registered and marketed here. They are currently subject to withholding tax. This would put these securities’ issues on an equal footing with so called Matilda bonds which are $A bonds, issued by foreigners in IWT exempt form, provided the bonds are sold overseas and interest is paid outside Australia.

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5. 2 Withholding Tax and the Exchange Rate

However, tax honesty depends largely upon the risk of detection and since this is minimal in Europe, tax evasion influences interest and exchange rates. The introduction of a withholding tax by one country (say Germany), when investors have the opportunity to shift funds offshore, results in the interest rate on identical financial instruments (DM bank deposits or bonds in Germany and Luxembourg) to differ as follows:

\[ r_{\text{euro}} = r_{\text{DM}}(1-t_{\text{DM}}) \]

where reuro stands for the interest rate available in the euromarket on which no withholding tax is levied; \( r_{\text{DM}} \) denotes the German interest rate; and \( t_{\text{DM}} \) indicates the German withholding tax rate. Tax dishonest investors and those with no tax liability in their home country will be indifferent between the tax-free eurorate and the after-tax German interest rate. This requires reuro < \( r_{\text{DM}} \); in other words, German interest rates have to rise. Consequently, the government would have to pay higher borrowing costs on their new and outstanding debt when it is rolled over.

When in response to the introduction of a withholding tax investors not only shift their funds offshore but in addition exchange these into a different currency, say the US dollar, the interest rate parity relationship has to be adjusted to obtain the following standard result:

\[ 1 + r_{\text{euro}} = \left[1+r_{\text{DM}}(1-t_{\text{DM}})\right]S/F \]

where S and F are the spot and forward rates respectively, defined as DM/US$. This equation shows that, after the introduction of a withholding tax, interest rate parity requires either a rise in the German interest rate, a depreciation of the spot rate (S rises, increasing the forward discount), an appreciation of the forward rate (F falls, widening the forward discount) or a combination of all of these factors.

The introduction of a withholding tax thus tends to:

- reduce the yields available to investors;
- raise domestic interest rates and thus borrowing costs;
- depreciate the exchange rate; and
- trigger a tax evasion induced capital flight.

Conversely, the complete or part abolition of withholding taxes on interest would tend to engender the opposite results for investment yields, borrowing costs, the exchange rate and international capital flows.

5. 3 Borrowing Revenues and Costs

Considering these effects, it hardly comes as a surprise that some national governments turn a blind eye to the issue of tax evasion, caused by the absence of withholding taxes or by confining interest income taxation to residents. If they are imposed on the latter, issuance of, or investment in, debt capital shifts offshore. As a consequence, governments usually raise less tax revenue than expected and they may actually end up with lower overall tax revenue at higher borrowing costs. The higher offshore interest rates on government debt spill over into the domestic debt market, raising domestic rates.

In the above analysis we ignored all other taxes. In general, withholding taxes are merely instalments which are taken into account for the final income tax assessment. Now, if its introduction causes a capital flight not only of newly saved funds, but also of existing assets, the government may in fact lose tax revenue. This happens when assets whose returns were previously taxed, migrate offshore. The imposition of a new tax induces economic agents to explore avenues for its circumvention and they are assisted in this respect by local and foreign banks that advertise, either overtly or covertly, the tax-free status of investing in a foreign jurisdiction.
6. ALLOCATIVE AND EQUITY DISTORTIONS

The exemption of non-resident recipients’ interest income from withholding taxation while at the same time fully taxing domestic residents’ interest income, engenders allocative and equity distortions.

The current withholding tax regime violates the principle of capital export neutrality. Capital export neutrality requires that residents’ after-tax rates of return are identical regardless of whether the funds are invested at home or abroad. The absence of withholding taxes in offshore markets provides an incentive for residents of a country to invest in debt securities overseas rather than at home where they face a heavier tax burden. One consequence, observed by several authors and confirmed by the German withholding tax experience, is excessive international flows of debt capital.

At least we would expect this investment behaviour in response to existing strong incentive differences. At home investors’ interest income is taxed at their marginal tax rate while overseas the income largely remains untaxed. This is a plausible assumption, considering the negligible risk of detection which investors run. For example, Australian tax authorities can in general only hope to crack open Swiss investment and bank accounts when the funds are from a source to be considered criminal in both jurisdictions, and tax evasion is not a criminal offence in Switzerland. However, another hurdle to be considered by international tax evaders can be straddled with similar ease. To the extent that an original investment amount has to be transferred overseas, various transfer pricing mechanisms can be used to obscure the source and the destination of the funds.

6.1 Capital Flow Distortions

Due to the surreptitious nature of international tax evasion of the kind analysed here, direct empirical evidence is impossible to obtain as noted above. However, we would expect that tax evasion of domestic (and other) investors influences the issue behaviour of domestic borrowers. In order to reduce borrowing costs we would predict a migration of the domestic issue market to the euromoney and capital markets. This appears to have happened in the case of Australia. While non-residents pay a 10 per cent withholding tax on issues in Australia the euro $A segments of the commercial paper and bond markets developed free from withholding tax. Domestic issuers thus responded, as expected, by transferring their fund raisings offshore. The resulting considerable size of the offshore commercial paper and bond markets attests to this. One should not be surprised to find amongst the investors in $A europaper and bonds, Australian residents.

Naturally, the government would like to relocate this thriving offshore market with its high value service industry to its home soil, thus enhancing Australia as an important regional financial centre. These considerations motivate in part the government’s IWT plans. One key feature of such centres is that they are the focal point of the issuance and trading of respective home currency securities. Success in this endeavour depends primarily on the extent to which withholding taxes are abolished. When withholding taxes are removed from new and outstanding bonds, issue and trading activity might shift to Australia, engendering an active market. If the tax-free status only applies to newly issued securities, a liquid domestic market might fail to develop. However, success is also influenced by the attitude of tax evaders who may continue to cherish the anonymity of euromarkets.

32 Many issuers of $A euro-commercial paper and eurobonds are foreign entities that subsequently swap the $A revenues with Australian borrowers for the currencies they desire. Currency swaps occur mainly to reduce borrowing costs and to hedge long-term exchange rate risk. Thus it would be wrong to argue that these offshore debt securities markets owe their popularity to favourable tax features alone.
Considering the declining share of IWT collected on debt securities held by non-residents, taking into account the revenue implications of the planned erosion of the IWT regime and factoring the tax deductibility of interest as a business expense into the revenue equation, one has to doubt whether, on net, any tax on interest is collected at all.

6. 2 Equity Issues

Economic agents that actually pay withholding taxes do so either because of their “civic conscience”, because the size of their funds does not warrant the additional transfer costs associated with euromarket investments, or because they are afraid of the possible penal consequences. Opportunities for tax-free investments in offshore markets are generally only available to companies, institutions and the wealthier segment of the community. For small savers transactions costs associated with overseas investments are ordinarily prohibitive. Their interest income is therefore fully taxed at their marginal tax rates. Having one tax regime for the “well off” and another for the “battlers” violates the principle of social justice. Many other countries face a similar dilemma and it is worthwhile examining some of their responses. We mentioned part of the German experience above. The massive capital flight following the introduction of a 10 per cent withholding tax at the beginning of 1989 forced the government to abolish it in the spring of the same year. Dissatisfaction with the resulting inequities in taxation prompted the German constitutional court to declare the taxation arrangements of interest income in violation of the equality principle of the basic law and ordered the government to introduce a more equitable system of interest taxation by the beginning of 1993. Faced with the hopeless task of eradicating international interest income tax evasion, the government introduced a 30 per cent withholding tax but assisted lower income earners by exempting the first DM6,000 of interest income (DM12,000 for married couples) from this tax.

The tax-free threshold is also designed to mitigate the taxation of an inflation induced interest income component. To show the gist of this argument, assume a nominal bond interest rate (r) of 5 per cent and an expected inflation rate (p\textsuperscript{e}) of 2 per cent. The after-tax real, that is, inflation adjusted investment yield (r_{r}\textsuperscript{a}) with a marginal tax rate (t) of 40 per cent then becomes:

\[
\begin{align*}
rr^{at} &= r(1 - t) - p_{e} \\
rr^{at} &= 0.05(1 - 0.4) - 0.02 \\
rr^{at} &= 0.01 \text{ or } 1\%.
\end{align*}
\]

Now assume inflation away, that is, p\textsuperscript{e} = 0. We would expect the bond rate to commensurately fall by 2 per cent, giving a much higher after-tax real yield under zero inflation of:

\[
\begin{align*}
rr^{at} &= 0.03(1 - 0.4) \\
rr^{at} &= 0.018 \text{ or } 1.8\%.
\end{align*}
\]

These examples demonstrate that even in a low inflation environment the taxation of the inflation component in interest income almost halves the after-tax real rate of return.

The social equity and the avoidance of the taxation of inflation interest income arguments provide us with two powerful reasons for the introduction of a similarly generous exemption of interest income from taxation.

7. CONCLUSIONS

Despite Australia’s growing international indebtedness, our share of revenue from interest withholding tax on interest income paid to non-residents has continually declined over the last decade. Recently implemented and currently planned changes will further erode the withholding tax base. We share this experience with many other countries. The root cause of this reluctance to tax the interest component of portfolio income at source is the ease with which this tax and any residual taxation in the home country can be evaded by international investors. Governments essentially facilitate this evasion by offering securities free from withholding tax and in bearer form, hoping that their own taxpayers are not amongst the investors. While the empirical evidence about tax
evasion is necessarily sketchy, the data from the omissions component of the balance of payments appears to suggest that the sums involved are enormous. Attempts by one country to insist on an effective withholding tax regime would result in higher interest rates and a depreciation of its exchange rate. Faced with an increasing internationalisation of capital flows and a concomitant shrinkage of the tax base, governments have to explore other avenues to raise funds. In the literature the immobile tax bases of land, labour and consumption are most frequently mentioned as alternatives and reliable sources of government revenue to the elusive nature of international capital income taxation. We have omitted from the analysis the impact of new financial derivatives on the government’s ability to apply withholding tax on international capital income. While the Treasurer and the Commissioner of Taxation\textsuperscript{33} and others\textsuperscript{34} have recognised the problem, a thorough analysis of the issues involved provides scope for future research.

\textsuperscript{34} See eg, G May, “Flying on Instruments: Synthetic Investment and the Avoidance of Withholding Tax” (1997) \textit{Derivatives Quarterly} 23-34.

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