income would not be able to use the deduction arising from the interest payable on a loan. Furthermore, a company that pays a low rate of tax, such as small businesses paying only 25 per cent tax, would also find loan substitutes appealing. Since the income from a loan substitute is not taxable for a chartered bank, a company would obviously expect a reduced rate on any loan substitutes it issues to a bank. The statutory tax rate in Canada is in the range of 48.3 per cent to 51.0 per cent. Thus the banks view a loan substitute earning one-half the normal loan rate to be approximately equivalent to an ordinary business loan. Yet, corporations that would normally be charged the prime rate have been charged one half per cent, or more, over one-half prime as a premium. In the hearings, the banks described this premium as a risk adjustment, reflecting the reduced collateral security and the less assured cash flow of the preferred shares and income debentures. Also, from the bank's standpoint, there is a delayed cash flow because half the effective interest is received only through reduced Canadian income tax payments. These will be described in more detail in the following sections.

How Loan Substitutes Alter Effective Tax Rates

The after-tax revenue generated by "loan substitutes" should be considered a transfer of after-tax revenue from one company to another. The impact that tax-exempt revenue has had on the Canadian chartered bank effective tax rates is best illustrated by using the example in Table 4.3. In the first case, Bank A has \$500,000 of ordinary loans outstanding at the prime lending rate of 20 per cent. Bank B also has \$500,000 of loans outstanding, but \$450,000 are regular loans at the prime rate of 20 per cent, while \$50,000 are "loan substitutes" which produce revenue at one half of the prime lending rate (or 10 per cent).

For Bank A, total interest revenue is \$100,000; there is no tax-exempt income. After expenses, the total income before tax is \$15,000 and, since there is no tax-exempt income, taxable income is also \$15,000. After applying the statutory tax rate of 50 per cent, tax payable is \$7,500. For Bank A, tax payable divided by pre-tax income produces a 50 per cent effective tax rate, the same as the statutory tax rate.

In the case of Bank B, it has \$450,000 of regular loans producing income of \$90,000, and \$50,000 of tax-exempt loans at the prime lending rate (or 10 per cent), producing non-taxable income of \$5,000 (i.e. total loans outstanding are still \$500,000). Total revenue is then \$95,000. After deducting expenses, total income is \$10,000 compared to \$15,000 for Bank A. However, \$5,000 of this income is not taxable and therefore must be deducted in order to determine the bank's actual taxable income, amounting in this case, to \$5,000. When the bank's statutory tax rate of 50 per cent is applied, the tax payable is \$2,500. Bank B's effective tax rate is determined by applying the \$2,500 tax payable to the \$10,000 of total pre-tax income. The "effective tax rate" becomes 25 per cent. In both cases, after-tax profits are \$7,500.

It is important to state clearly that tax-exempt investments do not lower the statutory tax rate payable by the banks on taxable income. However, since all the income received by the banks on loan substitutes is exempt from taxes, these loan substitutes lower the actual taxable income of the banks. It should be added that the banks must still borrow money to lend in the form of loan substitutes, and all the interest paid on the funds borrowed is still