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Income shifting, investment, and tax competition: theory and evidence from provincial taxation in Canada

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Abstract

We study corporate income taxation when firms operating in multiple jurisdictions can shift income using tax planning strategies. Because income of corporate groups is not consolidated for tax purposes in Canada, firms may use financial techniques, such as lending among affiliates, to reduce subnational corporate taxes. A simple theoretical model shows how income shifting affects real investment, government revenues, and tax base elasticities, depending on whether firms must allocate income to provinces or not. We then analyze data from administrative tax records to compare the behavior of corporate subsidiaries that may engage in income shifting to comparable firms that must use the statutory allocation formula to determine their taxable income in each province. The evidence suggests that income shifting has pronounced effects on provincial tax bases. According to our preferred estimate, the elasticity of taxable income with respect to tax rates for "income shifting" firms is 4.9, compared with 2.3 for other, comparable firms.

Keywords: Tax competition; Income shifting

1. Introduction

In 2000, following the lead of the federal government, two Canadian provinces—Alberta and Ontario—announced sharp reductions to take place in general corporate income tax rates, from 15.5 to 8% by the year 2005. Since then, a number of other provinces have begun to cut tax rates as well, albeit not as dramatically.

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Such sharp changes have occurred in the past. The province of Quebec lowered its corporate income tax rate on active business income from 16 to 5% in 1982, but has slowly raised the rate to about 9% over the past two decades. Until recently, however, most other provinces had held their corporate income tax rates roughly constant since 1986, when corporate income tax reform was introduced at the federal level with a strategy of rate reduction and fewer tax incentives.

What factors can explain the decisions of governments about statutory corporate income tax rates? In recent years, increased attention has been given to the role of income shifting by multijurisdictional firms. Reported income of corporations can be highly responsive to statutory tax rates, when income can be easily shifted from one tax jurisdiction to another without moving real assets[1]. Some authors have suggested that income shifting may spur tax competition among governments and exert downward pressure on statutory rates (see, e.g. Gordon and MacKie-Mason, 1995) and on corporate tax credits (Haufler and Schjelderup, 2000). While income shifting may increase elasticities of taxable income, however, it may also make real investment decisions less responsive to tax rates, if it allows firms to avoid some portion of their tax liabilities in the host country for investment. Thus, if governments value real investment of multijurisdictional firms, as well as the tax revenues they generate, income shifting may have ambiguous effects on welfare.

In order to evaluate the effects of income shifting, it is, therefore, important to understand its potentially offsetting effects on the elasticities with respect to local tax rates of taxable income and of real corporate assets. In our empirical work, we investigate income shifting by multijurisdictional firms to reduce subnational tax liabilities in Canada. In doing so, we exploit a particular feature of corporate income taxation in Canada: groups of corporate affiliates are not permitted to consolidate income for tax purposes (as they are required to do in many US states). In contrast, multijurisdictional firms that do not incorporate separate affiliates in each province must allocate total income according to a statutory formula based on the distribution of sales[2] and payroll among provinces. Allocation rules make it more difficult for a company to use certain techniques, particularly financing, to shift income to low-tax jurisdictions than it is under the separate accounting method[3]. Therefore, the sensitivity of taxable income to subnational rate changes should be lower for companies that allocate income, compared with comparable firms that do not. Our results, based on administrative tax data, are consistent with this hypothesis. According to our preferred estimate, the elasticity of taxable income with respect to tax rates for “income shifting” firms is 4.9, compared with 2.3 for other, comparable firms.

[1] For recent surveys on corporate tax competition, see Wilson (1999), Mintz (2000) and Gresik (2001).

[2] The sales factor is determined on a destination basis in accordance with the retail sales tax system.

[3] Many studies tend to focus on transfer pricing techniques for shifting income at the international level. However, the simplest way to shift income is through financial transactions, including “double dipping” deductions for interest expenses (see Mintz, 2000). At the subnational level, the gains to such strategies are reduced, since tax rate differentials are typically less than they are internationally, but the non-tax costs of shifting are probably commensurately lower.