

**Commentary on *International Taxation*:
Tax Policy when Corporate Profits are a Return to Labor
rather than Capital**

by

**Roger H. Gordon
UCSD**

**Jerry Hausman
MIT**

The authors of this chapter are all leading experts on international taxation. Rachel Griffith (along with Michael Devereux) has examined how taxes affect the location decisions of multinationals.¹ James Hines, often jointly with Mihir Desai, has documented a wide variety of behavior responses of multinationals to the existing tax code.² Peter Birch Sørensen is well known for his work on the dual income tax and on tax coordination.³ He also has a recent overview of capital taxes in an open economy that provides a more detailed examination of many of the issues that come up in the current chapter.⁴

Given this expertise, the current chapter not surprisingly provides an informed and balanced summary of results from the recent academic literature on the many types of behavioral responses of multinationals to the existing tax treatment of cross-border capital investments, the welfare effects of tax competition, and the merits/demerits of possible tax reforms. As a result, in this commentary our objective will not be to raise questions about their assessment of the past academic literature but rather to argue that the emphasis on *capital* taxes both in the paper and in the past academic literature is misplaced. As we argue below in section 1, the data make clear that corporate profits, and particularly the profits of multinationals, largely do *not* represent capital income. We then argue in section 2 that the current tax treatment in the U.K. (and in other countries) of income from multinationals also makes no sense if the underlying tax base represents capital income. If their chapter, due to this focus on capital taxes, cannot come close to explaining either observed profit rates or existing tax structures, then it inevitably will be missing some of the key pressures affecting the design of the tax structure, and will not be taking such pressures into account when considering possible tax reforms.

¹ See, for example, Devereux and Griffith (2003).

² For a summary of this research, see Hines (1999) or Gordon and Hines (2002).

³ See, for example, Nielsen and Sørensen (1997) and Sørensen (2004).

⁴ See Sørensen (2006).

In section 3, we argue that the best available explanation for observed corporate income is that it largely represents the return to the efforts of both entrepreneurs and corporate managers that (in part for tax reasons) they choose to retain within the firm, and ultimately receive as realized capital gains on their shares in the firm. Section 3 then lays out what the existing tax literature implies about the appropriate tax treatment of multinational income to the extent it represents such labor income. To a reasonable degree, the current tax treatment of multinationals does approximate such a tax treatment.

Section 4 then discusses how this tax treatment should change if the domestic tax system undergoes any of several plausible major tax reforms. Section 5 considers the case for tax coordination across countries, while section 6 provides a brief discussion of some omitted issues.

1. What is the source of reported corporate income?

Most of the past academic literature presumes that the corporate tax base reflects the return to capital invested in the corporate sector, so that the main effect of the tax is to discourage capital investment in the domestic corporate sector. Yet Gordon and Slemrod (1988) find that the corporate tax base would be considerably *larger*, and overall tax revenue a bit higher, if the normal return to capital were exempted from tax (in present value) through allowing all investment to be expensed while making all personal and corporate financial income from capital (dividends, interest, and capital gains) nontaxable (and in the case of interest not tax deductible).⁵ This analysis suggests that the corporate tax base comes almost entirely (or even more than entirely) from sources other than capital income. Gordon, Kalambokidis, and Slemrod (2004a) then argue, based on this evidence, that the effective tax rate on capital is also very low.

Intuitively, if profits simply represent the normal income to capital, then the profit rate should equal the real risk-free interest rate plus a risk premium sufficient to compensate for the risk inherent in corporate investments, and plus of course the resulting random return. The average real risk-free interest rate in the U.S. (represented by the T-bill rate) equaled 1.4% during the period 1959-2003,⁶ while the average corporate profit rate in the U.S. reported in Auerbach (2006) and Auerbach-Poterba (1987) was 8.9%. during the same time period. If this difference between the average return to corporate capital and the real interest rate represents a risk premium, then the corporate profit rate should be no more or less attractive than a risk-free return on the same capital stock. Yet the corporate profit rate exceeded the real interest rate in every year but two (1981-2) during this sample period, and even then was lower on average by only 2.5% whereas during the rest of the sample period the profit rate on average was 8% above the real interest rate. We cannot make sense of the size of the observed profit rate solely due to risk.

⁵ Gordon, Kalambokidis, and Slemrod (2004) find that overall tax revenue would be only very slightly lower if the same tax reform had been conducted in 1995. Similar findings have been reported for Denmark by Sørensen (1988) and for Germany by Becker and Fuest (2005).

⁶ Here, we used data reported in the Economic Report of the President for the 3-month T-bill rate for the nominal interest rate, and the December to December percent change in the CPI as a correction for inflation.

If reported corporate profits do not represent a normal return to savings in corporate capital, then what are they? A conventional answer here is that they represent "rents" accruing to corporations on their infra-marginal investments. In order to understand the economic effects of taxation of such "rents," the key issue is where these rents come from?

One type of "rent" is profits earned from resources extracted from the land. If the price paid for the land when it was purchased reflected the present value of these rents, then the business would still be earning just a normal rate of profit. If the firm bought the land before the presence of the resources was known, and then discovered them from say exploratory drilling, then the "rents" represent a stochastic return to this investment in exploratory drilling. Such activity can then explain why corporate profit rates are so risky, but not why their ex post distribution is so much more attractive than a market interest rate. If the manager or other employees have expertise, though, in where oil might be found, then the firm can earn an above normal return on its investments in land and drilling. This extra return represents a return to the labor effort of the manager and employees, though, not a return to capital.

This example is generic. A key objective of any business manager (or entrepreneur) is to identify activities that generate such rents, e.g. products that are not "commodities." If the manager is successful, the resulting above-normal corporate profits (now and continuing into the future) represent a return to the current ideas and effort of the manager, so are one form of labor income. In part for tax reasons, the present value of these extra profits are often left within the firm rather than paid out to the manager (or entrepreneur) as wages and salaries.⁷ The innovator ultimately receives this income in the form of long-term capital gains, and for tax purposes this income show up as well as continuing above-normal corporate profits.⁸

In a closely-held firm, for example, compensation paid in the form of company stock is often valued for tax purposes at the par value of the stock, so at a minimal level, implying that employees avoid taxation at ordinary rates on their compensation while the firm foregoes a deduction for wage and salary payments. If the employees' tax obligations on wages and salaries (less any future capital gains taxes paid when the shares are sold) exceed the tax savings the corporation could receive from being able to deduct wage and salary payments, then there is a joint saving in personal and corporate tax payments from not paying wages but instead using stock compensation. Reported corporate profits are then higher, since there is no longer a deduction for wage and salary payments to these employees.

⁷ If these retained profits would be shared with other shareholders, the manager can be compensated with new share issues (or stock options). The manager is then taxed on the fraction of compensation taking this explicit form, perhaps at a favorable rate if the shares are undervalued for tax purposes or if the market valuation of the shares does not completely reflect the future value of the above-normal profits..

⁸ Entrepreneurs face a tax incentive not to pay out as wages and salary the profits resulting from their ideas and effort to the extent that the effective taxes paid on wages and salaries exceed those paid on profits that are retained and ultimately realized in the form of capital gains.

Gordon and Slemrod (2000) in fact find that reported corporate profit rates are very sensitive to the difference in the tax rate that would be paid on wages and salaries and that paid (through both corporate taxes and personal capital-gains taxes) if the funds instead are retained. As a result, observed corporate profit rates should be high during time periods when the corporate tax rate is low relative to personal tax rates, consistent with the recent growth in reported corporate profit rates as corporate tax rates have fallen.

Recent papers examining which firms become multinationals find that these firms tend to be much more profitable than are firms that simply operate in the domestic economy.⁹ These firms presumably have developed particularly valuable new products or particularly efficient new processes, so have a comparative advantage over foreign firms in the same industry. The profits resulting from these new products or processes again should represent the return to the effort, skill, and imagination of scientists or entrepreneurs employed by the firm, and in (large) part show up for tax purposes as higher corporate profits, accruing to the firm on its operations throughout the world, and not just in the U.K.

How plausible is it that the size of the observed corporate profit rate can be explained based on income attributed to the ideas and efforts of the entrepreneurs? Put rhetorically, how plausible is it that the additional annual income to Microsoft attributed to the ideas and efforts of Bill Gates are an important fraction of the above-normal rate of return reported by Microsoft? Very plausible. The value of the shares he now holds in the firm or previously sold represents the ex post present value of his contributions to the firm beyond what he has been paid in salary, and the corporate income accruing to these shares represents labor income generated by Gates.¹⁰

2. Taxation of multinationals if profits are only capital income

In thinking through the appropriate tax treatment of the profits of multinationals, a key distinction in the academic literature is between a "residence-based" vs. a "territorial" corporate tax. Under a territorial tax, profits are taxable to the extent that they arise from capital invested in the domestic economy regardless of the location of the owner of this capital. Under a residence-based tax, profits would be taxable whenever they are owned by a domestic resident, regardless of where the capital is located.

Unless a country has market power in the world capital market, then the past academic literature argues that a country should not make use of a territorial corporate tax. In response to such a tax, investors simply shift their investments abroad until the pretax domestic return to investment has risen by enough to offset the tax. That capital is paid

⁹ See Helpman (2006) for a recent survey of this large and growing literature.

¹⁰ Reported corporate profits are higher whenever the income ultimately accruing to innovators is never deducted by the corporation as a business expense. Based on U.S. tax law, stock compensation and nonqualified options issued to executives are both a deductible expense, so do not explain higher corporate profits (as long as the value assigned to this compensation reflects its market value). The corporate income accruing to the founding shares in the firm, though, does measure a return to entrepreneurial effort.

more pretax to compensate for the tax means that workers are paid less, if the firm is to continue to break even. While both a territorial corporate tax and a tax on labor income both are ultimately paid by workers, a territorial corporate tax is less attractive on efficiency grounds since it discourages capital investments as well as labor supply.

At least based on the evidence reported in Hines and Hubbard (1990) for the U.S., the existing attempt to impose domestic corporate taxes on foreign-source income has been largely ineffective. Firms can postpone tax indefinitely through deferring any dividends to the domestic parent, and then repatriating heavily during occasional years when the tax rate at repatriation is low, as occurred in the U.S. recently. Alternatively, firms can simultaneously repatriate profits from both more highly-taxed as well as more lightly-taxed countries so that no domestic tax is owed at repatriation, given worldwide averaging. This chapter presumes that the U.K. tax also in practice approximates a territorial corporate tax. Yet, the academic literature suggests that a country loses from use of a territorial corporate tax, making the existence of the tax puzzling.

A residence-based tax, in contrast, attempts to tax residents on any income they receive from their savings, regardless of the type or location of the asset. Since capital gains are normally taxed at a much lower effective tax rate than dividends or interest income, assets generating nontrivial capital gains would be tax favored unless there is some compensating tax provision. Since much of the income from corporate equity takes the form of capital gains, the corporate tax can serve as such a compensating tax provision, ideally leading to an effective tax rate on corporate capital equal to that on other types of assets.¹¹ A corporate tax is then an important backstop to any personal tax on income from savings.

To implement a residence-based tax on corporate income, though, a country would need to tax corporate profits to the extent that they are owned by domestic residents, regardless of the location of the investment. If domestic firms are entirely owned by domestic residents, then this approach means taxing at accrual their foreign as well as their domestic profits.¹² To the extent that domestic firms have foreign owners, the corporate tax rate should be reduced proportionately.¹³ Conversely, when domestic residents buy shares in foreign corporations, to that extent the corporate profits of the foreign firms should be taxable. If foreign subsidiaries located in the U.K. have no domestic shareholders, then they should be tax exempt.¹⁴

None of these tax provisions are seen in the U.K., or anywhere else. In some cases, enforcement problems can be offered as an explanation. For example, if profits received

¹¹ Given the existing dividend imputation scheme in the U.K., the corporate tax is partially rebated on income paid out as dividends, so that dividend income is only subject to personal taxes. As a result, the corporate tax focuses mainly on income generating accruing capital gains to shareholders.

¹² Alternatively, if the foreign profits are only taxed at repatriation, then the tax rate should be adjusted so as to replicate the effective tax rate that would have arisen with a tax at accrual. See Auerbach (1991) for a derivation of the appropriate rate.

¹³ Formally, this is true only if the country has no market power in the international market for corporate equity.

¹⁴ The argument here is the same as that against a territorial corporate tax.

by foreign subsidiaries located in the U.K. were tax exempt, then domestic shareholders may try to appear to be foreign shareholders, e.g. buying domestic equity through a Swiss financial intermediary, so as to avoid tax. If this threat from tax evasion is large enough, then foreign shareholders in the domestic economy should be taxed to some degree, trading off the benefits from reducing evasion with the costs from reducing investment in the domestic economy.

Yet there is no apparent pressure to adopt any of the above tax provisions, even though these are the provisions that avoid any distortions to the location or form of capital that residents choose to invest in. Of course, the current tax treatment in the U.K. may just be very badly designed. However, its stability over time and the use in many other countries of the same basic tax structure should raise questions about whether the tax structure in fact creates such large distortions. The inference we would draw is that this tax structure is responding to a variety of other pressures not taken into account in the above discussion. Without taking these pressures into account, it is hard to be confident when making policy recommendations based on the above framework.

3. Taxation of multinationals if profits are labor income

If corporate profits represent labor income, through for example stock compensation replacing wage payments either for highly-paid regular employees or for entrepreneurs, then how should the corporate tax best be designed, given that labor income is otherwise taxable under the personal tax?

To focus this discussion on the issues left out of the "International Taxation" chapter, we assume that there are no domestic taxes on income from savings, and full expensing of new investment (equivalent to use of an ACE).¹⁵ The question becomes how the tax system should be designed so as to tax labor income at the same rate, regardless of the form of compensation, to avoid distorting the form of compensation. Since wages and salaries are taxable personal income to the employee,¹⁶ distortions are avoided only to the extent that other forms of compensation are ultimately taxed at the same rate.

There are many ways to accomplish this outcome. If the corporate rate (together with future individual tax liabilities on the resulting capital gains) equals the maximum personal tax rate due on wage and salary income, as proposed in the "International Taxation" chapter, then employees in the highest tax bracket will be indifferent between wage and stock compensation,¹⁷ while all other employees face a tax advantage from receiving wage compensation. Since use of stock compensation is largely confined to top

¹⁵ Gordon, Kalambokidis, and Slemrod (2004a) argue that the U.S. tax system as of 1995 came close in practice to exempting capital income from tax.

¹⁶ In the U.S. at least, wage and salary income is also subject to payroll taxes and State as well as Federal income taxes.

¹⁷ Similarly, entrepreneurs will be indifferent on tax grounds between wage payments and retention of accumulating profits.

executives, this approach should provide a reasonable approximation to a level playing field.¹⁸

If this approach is used to avoid distortions to the form of compensation, how would it deal with cross-border economic activity? Passive portfolio investments by domestic residents in foreign firms would not include any "labor" income, so should be treated the same as any other capital income. If capital income faces very low effective tax rates, then this foreign-source portfolio income should face low effective rates as well. Given existing crediting arrangements, this outcome largely corresponds to existing practice.

If foreign subsidiaries locate in the U.K., then their highly-paid employees face the same tax incentive as highly-paid employees of domestically-owned firms to receive compensation in the form of stock rather than wages and salaries. These incentives would be avoided if the profits of the subsidiary are taxed at the same rate as applies to other firms operating in the domestic economy, consistent with the observed tax treatment.¹⁹

To avoid having this taxation of foreign subsidiaries located in the U.K. discourage capital investment in the U.K., capital investment can be expensed (or equivalent), consistent with the treatment under an A.C.E.²⁰ To avoid discouraging foreign firms from using their intellectual capital in the U.K., royalty payments would need to be deductible (as they are in the U.K.).

The sticking point here is determining the size of royalty payments for tax purposes, given the pressures faced by both the tax authorities and the firm in negotiating over their size. The multinational presumably would like to maximize the size of these deductions, subject to the constraint that enough profits remain within the subsidiary to allow it to provide outside shareholders an adequate rate of return on their invested funds. If subsidiaries with profitable technologies are fully mobile across possible host countries, then tax competition implies that tax rates will be pushed down to the point that host country governments just break even by allowing entry of foreign subsidiaries. The country breaks even if it collects no more in taxes than it would if the domestic factors employed by the firm instead were reallocated elsewhere, consistent with it allowing full deduction for the market royalty rate for any proprietary technology used by the subsidiary. If a subsidiary using a profitable technology gains from locating in a particular host country, however,²¹ then the host country government does have an incentive to tax the location-specific profits of the multinational, for example by

¹⁸ Bonuses tied to stock prices rather than stock compensation can then be used to provide incentives to employees for whom wage compensation is favored on tax grounds.

¹⁹ The subsidiary might well shift these profits abroad to avoid domestic tax. However, if the profits must ultimately be repatriated (the same issue faced in other contexts below), then they will be subject to the domestic corporate tax as well as personal capital gains taxes on any shares owned by domestic employees, so face a domestic tax rate comparable to that on wage and salary income.

²⁰ We have argued above that any country that is small relative to world capital markets has an incentive to exempt capital investments from tax.

²¹ For example, a retailer like Walmart profits from setting up operations in each possible host country, so is not indifferent (taxes aside) to the location of its subsidiaries.

imposing a withholding tax on royalty payments made to the foreign parent firm.²² We therefore expect full deductibility of royalty payments when firms are fully mobile across countries, but conflicts over the determination of royalty payments and some net taxation when firms are not fully mobile.

Our key concern with the proposal in this chapter concerns the proposed tax treatment of income earned by the subsidiaries of domestic multinationals operating abroad. Under the proposal, this income will be exempt from domestic tax. Yet this income includes a return to the ideas and effort of the entrepreneur and other firm employees, introducing a tax distortion favoring the use of ideas abroad, violating for example the proposed "capital ownership neutrality."

If these profits face corporate tax at accrual at the same rate as applies to domestic firms, then the tax treatment of labor income would be neutral. This treatment of course differs from the current law, which taxes foreign-source profits at repatriation, as well as from the proposed exemption treatment.

However, taxation of the income from foreign subsidiaries at repatriation is equivalent to taxation of their earnings at accrual if funds sent abroad are immediately deductible for tax purposes while all repatriations are taxable in full (and all realized capital losses deductible in full). This assertion is simply an application of the argument that taxing pension income when received is equivalent in present value to taxing the initial wage income that is withheld to invest in the pension plan: in either case, individuals are fully taxed on all compensation payments they receive, whether in the form of wage payments or pensions. The current treatment of pension income introduces no distortions to the form of compensation as long as the individual's tax rate is constant over time and as long as the rate of return earned on funds invested through a pension plan is equivalent to the rate of return that could be earned on other savings.²³

This cash-flow tax treatment of transactions with foreign subsidiaries of domestic multinationals differs from current law because funds sent abroad are not currently deductible at the date when they are sent abroad but instead are deductible when invested capital is finally repatriated. In practice the amount of funds sent abroad by multinationals is likely to be small relative to size of their operations, since largely they are providing intellectual capital to their foreign subsidiaries, so that this difference between current law and a neutral law should be minor.

An immediate complication, though, is that if the home country imposes the same effective tax rate on foreign-source entrepreneurial income as on other sources of labor income but also the host country taxes these profits, then the overall effective tax rate on foreign-source entrepreneurial profits exceeds that on other types of labor income. Here, existing tax provisions allowing a credit for taxes paid abroad helps restore neutrality in the effective tax treatment of different forms of labor income from the perspective of the individual, even if not from the perspective of the home vs. host country governments.

²² This is true up to the point that the subsidiary would choose to shut down.

²³ Recall that we continue to assume no domestic taxes on income from savings.

Neutrality requires that foreign-source income ultimately be taxed at the domestic tax rate, regardless of which government receives the revenue. The effective tax rate could be higher, in spite of the credit, if the foreign tax rate faced by the multinational exceeds the domestic tax rate. Given the ease of shifting profits to countries with low tax rates (such as tax havens), few multinationals should face a tax rate on foreign-source profits above the domestic rate. The effective tax rate could end up being well below the normal domestic corporate tax rate, however, if firms can retain funds abroad until they have an opportunity to repatriate them when their domestic tax rate is temporarily low. For example, the U.S. in 2003 allowed multinationals to repatriate profits subject to a tax rate of only 5%, so that the overall corporate tax rate on these profits could have been as low as this 5% if the income had previously accrued within a tax haven. This outcome can yield a very low ex post tax rate on these foreign-source earnings, and the anticipation of such opportunities generates an ex ante tax incentive encouraging use of entrepreneurial ideas abroad.²⁴

Another potential problem is that firms may never need to repatriate profits earned abroad, so never face domestic tax on these earnings. Firms can continue to face attractive activities abroad into the indefinite future. Even if they need to raise further funds for domestic investments, multinationals may be able to borrow using foreign assets as collateral, so draw on these funds without formally repatriating them. Firms may well find a variety of other ways of implicitly repatriating the funds, e.g. having the foreign subsidiary invest directly in the project that the parent firm hopes to finance. Deferral of tax until repatriation can at times mean that the tax is never paid, again introducing a distortion favoring foreign activity and favoring the creation of intellectual capital.²⁵

This distortion is larger the lower the effective corporate tax rate paid abroad on these foreign-source profits. In particular, by shifting profits into a tax haven and never repatriating them, the firm can face little or no taxes on their foreign-source earnings. The U.K. responds here by making foreign-source profits immediately taxable at the domestic tax rate if they arise in a country with a corporate tax rate less than three-quarters of the U.K. rate. Not only does this approach reduce a distortion to the location of use of intellectual property but it also preserves the domestic government's tax base. Since not all countries with a corporate tax rate below the domestic rate fall under this provision, though, some distortions still remain.

If domestic multinationals face a tax when foreign-source earnings are repatriated, another way to avoid this tax is to shift their headquarters abroad before this repatriation

²⁴ Funds can also be repatriated when the firm has domestic tax losses. Discretion over the timing of repatriations allows for greater shifting of income across time periods, so greater tax smoothing than is allowed under existing provisions on tax loss carry-forwards and carry-backs. With full tax smoothing, though, marginal profits are still taxable at the domestic corporate tax rate.

²⁵ Desai et al (2002) report though that foreign subsidiaries of U.S. multinationals paid out 54% of their profits in dividends during 1982-97, compared to a pay-out rate of 40% for all U.S. firms included in the Compustat data base. These figures do not suggest any systematic tendency to retain profits abroad.

occurs. This relocation avoids tax unless the move is viewed to entail a constructive repatriation of all existing foreign assets.

Equivalently, domestic inventors can set up a firm abroad to produce based on their invention, so that the return to the inventor's intellectual property is not part of the domestic tax base. If the resulting income of the inventor accrues in a tax haven, then the inventor is simply taxed at domestic capital-gains rates rather than the much higher tax rate on wage and salary income. One way for governments to close this loophole is to treat as labor income for tax purposes all receipts from foreign firms where the individual has had a past relationship, allowing any funds sent abroad to be fully tax deductible in order to avoid distorting savings incentives.

Of course, trying to treat differently for tax purposes any shares owned in firms where the individual has had a past relationship introduces administrative complications. This distinction is really unnecessary. If the same treatment were extended to all investments, allowing a deduction when any funds are invested and a tax on all funds received in return, then this treatment introduces no distortions for any passive "marginal" investments. This outcome is precisely what is currently done with pension contributions. With a pension-type treatment of all savings, we end up with a personal consumption tax.

Under a personal consumption tax, since entrepreneurs and inventors ultimately face full taxation at labor income tax rates on any returns they receive from their intellectual property, whether in the form of capital gains, dividends, or wages, there is really no remaining need for the corporate tax, at least as a backstop for the personal tax on labor income. There may still be possibilities of tax avoidance through bequeathing shares at death, where labor income taxes have not yet been paid on the accumulated value. The response here that preserves a level playing field would be to treat any remaining funds never paid out to the shareholder during his or her life as taxable at labor income tax rates at the date of death. Another problem can be the monitoring of funds received from abroad. This potential problem may require information exchange between governments, or monitoring of funds from abroad deposited in domestic financial institutions.

Inventors and entrepreneurs can also avoid domestic tax on the returns to their intellectual capital by moving abroad before these profits are received.²⁶ To the best of our knowledge, this problem has not to date been addressed in the U.K. or the U.S. To do so would involve constructive receipt of any earnings or capital gains that have accrued on business activity at the date when the individual moves abroad.

Another issue that arises with intellectual capital as well as with past investments in physical capital is the temptation governments may have to seize existing assets. Calling a firm's intellectual property "rents" reflects this temptation. Past efforts at developing intellectual property or past savings to finance physical capital investments cannot be undone, so that these existing assets can be taxed at very high rates without any

²⁶ We have been told that this is a serious problem in the Netherlands, where business owners often move abroad (typically to Belgium) before selling their businesses.

immediate loss of the tax base. However, the threat of this happening again in the future can badly discourage future investments in intellectual or physical capital in the country.²⁷ Here, governments cannot easily commit not to impose such windfall taxes in the future, and at best can build up a reputation for grandfathering existing assets when tax policy is changed. Losing this reputation through a one-time seizure can be very costly.²⁸

4. Implications of possible domestic tax reforms for the tax treatment of cross-border activity

In section 3, we argued that the current tax treatment of foreign-source income is broadly consistent with what we would expect if the implicit aim is to impose a neutral tax on the labor earnings of domestic residents, regardless of the form of compensation and regardless of where the ideas are employed.

To what extent would current tax provisions need to be modified under any of a number of plausible reforms to the domestic tax system? How do international considerations affect the merit of any of these proposals?

A common proposal is to reduce the effective tax rate on income from savings. One possible means of accomplishing this reform would be to exempt dividends, interest income, and capital gains from personal tax, and to allow expensing for new capital investments. In our discussion above, we have assumed that the effective tax rate on income from savings is already very low, implying that any changes would be minor. However, any reduction in the tax rate on capital gains does reduce the effective tax rate on entrepreneurial income that is ultimately received in the form of capital gains. To leave the effective tax rate on this form of labor income unchanged could then require a rise in the domestic corporate tax rate.

This chapter proposes to shift to a territorial corporate tax. Under such a tax, foreign-source earnings generated by the ideas of domestic residents become free of domestic corporate tax, so would only be subject to foreign corporate taxes and domestic personal capital gains taxes. To the extent that foreign-source earnings had previously been subject to domestic corporate taxes at repatriation, this reform also reduces the effective tax rate on the foreign-source earnings of domestic entrepreneurs. The resulting change may be limited, however, since the effective domestic corporate tax paid at repatriation has been small, due to the existing credit.

What would be the effects of a shift to use of formula apportionment, a frequently proposed reform in the E.U.? Under such a proposal, the profits earned by a domestic

²⁷ This is referred to as a time-inconsistency problem in the economics literature.

²⁸ Note that even an increase in the personal tax rate involves a partial seizure of the return on intellectual capital not yet paid out to the inventor.

multinational would be taxable at a weighted average corporate tax rate, with the weights based on the fraction of activity (property, payroll, or sales) located in each of the countries where a firm does business. Only a fraction of these profits would be taxable in the entrepreneur's home country, so that most of the earnings from the entrepreneur's intellectual capital would escape domestic taxes. Whether these earnings still face a comparable tax rate depends on where the firm does business. Making use of intellectual property in countries with low corporate tax rates is encouraged, and if the resulting weighted average corporate tax rate is below the domestic rate then there is a resulting tax distortion affecting forms of compensation. Distortions should be less than with a territorial tax or with the existing corporate tax, however, since shifting property, payroll, or sales to a tax haven should be more costly than shifting accounting profits.²⁹

Another possible reform supported in this chapter, given its successful use in Scandinavia, is a dual income tax. Under such a tax, corporate income is first taxable under the corporate income tax, with the same issues as elsewhere about the domestic tax treatment of foreign-source income. Individual receipts from dividends, interest payments, and capital gains, are then taxable as "capital income" as long as in total they are less than some fraction of the invested capital. In principle, any excess is taxable as "labor income," though at least in Sweden any excess capital gains are instead treated as half capital income and half labor income. In practice, capital losses are instead treated as negative capital income.

To what degree does such a dual income tax distort an individual's incentives to become an entrepreneur, and if so to receive compensation as wages and salaries vs. dividends or accruing capital gains in shares owned in the firm? Given the option to pay out profits as wages and salaries, the effective tax rate on positive entrepreneurial income should at most equal the personal tax rate on wages and salaries. To avoid introducing an incentive to retain earnings within the firm, converting wage into capital gains income, the chapter proposes setting the corporate tax rate so that corporate taxes plus any further capital gains taxes are equivalent to the labor taxes that would otherwise be due on this income. For domestic firms, this proposal could work appropriately. Multinationals, however, can avoid the domestic corporate tax by reporting the income abroad. Under the proposal, corporate income reported abroad, perhaps through use of transfer pricing, is taxed as capital gains under the domestic tax code, unless the individual's overall return to "savings" is so high that the excess is again taxed as labor income.³⁰

Note, though, that taxing all earnings to labor effort as labor income requires allowing losses attributed to ideas that work out poorly to be deductible from other labor income as well as imposing tax on profits at labor tax rates. When capital income is reclassified as labor income only when it exceeds a normal rate of return, this approach does not treat losses resulting from entrepreneurial effort appropriately, discouraging risk-taking.

²⁹ Formula apportionment introduces its own additional distortions, however, as described in Gordon and Wilson (1986).

³⁰ Neutral incentives require that the "normal" rate of return equal a risk-free interest rate. At least in Sweden, the "normal" rate of return taxable as capital income has been set much higher, leading to a reduced tax rate on a sizeable fraction of entrepreneurial income.

What are the international tax implications of a shift from the income tax towards greater use of a VAT? Under a VAT, real goods shipped abroad are tax deductible while any goods imported from abroad are fully taxable. Under the tax treatment proposed above for intellectual capital used abroad, funds sent abroad would be tax deductible while all repatriated funds would be fully taxable. In theory, the two approaches are equivalent in present value.³¹ A VAT therefore should lead to neutral incentives as long as all of the consumption of an entrepreneur/inventor occurs in the home country. A VAT, though, is a proportional tax, while the income tax allows much more flexibility in the rate structure. To preserve some semblance of the progressivity available under the income tax, VAT's normally impose higher tax rates on goods consumed mainly by the rich.

5. Tax coordination

One issue discussed at length in the chapter on International Taxation is tax coordination across countries. What pressure is faced for tax coordination, if the role of the corporate tax is to impose a neutral tax on all forms of compensation for labor effort?

Given substantial differences in the maximum tax rates on labor income across EU countries, neutrality requires differences in corporate tax rates as well. Any shift towards equal corporate tax rates leads to a subsidy to non-wage compensation in countries with high personal tax rates and a penalty on non-wage compensation (incentive pay) in countries with low personal tax rates.

If foreign-source earnings from intellectual capital can be kept abroad indefinitely, however, then the threat of tax evasion through use of tax havens remains. A variety of policies can then provide means of lessening the gains from such tax evasion. One approach would be a minimum corporate tax rate. Another would be information sharing, allowing the home country to tax profits reported in a tax haven at accrual. If entrepreneurs are taxed at death on the accumulated value of unrepatriated assets, information sharing again would be needed to help assess the value of these assets.

These pressures, though, largely become moot if countries shift to use of a VAT or a dual-income tax. They may become somewhat less pressing through use of formula apportionment.

As discussed in a variety of recent papers, e.g. Keen and Ligthardt (2004), information sharing can only be expected to occur if the host country has an economic incentive to provide such information. These issues are nicely discussed in the International Taxation chapter, and are as relevant when information sharing is needed to enforce taxes on labor income as they are when the underlying source of income is capital income.

³¹ This difference is analogous to the difference between an R-base and an F-base, using the terminology of Meade (1978).

6. Omitted issues

The chapter on International Taxation starts with the sentence "This chapter assesses the role of international considerations in tax design, emphasizing issues related to capital taxation." Our concerns with the chapter arise from this choice to focus on capital taxation. By our reading of the evidence, the key issues driving the current design of international tax provisions relate to the taxation of labor income, and more specifically income from entrepreneurial effort and imagination.

Taxation of labor income raises a quite different set of enforcement issues than taxation of capital income. Deferral of taxes, for example, is not a concern, only their present value. Taxation of income at repatriation can therefore work fine, as long as foreign-source earnings are ultimately repatriated. In general, current tax provisions seem reasonably well designed to try to implement a neutral tax rate on income earned by domestic workers, managers, and entrepreneurs, regardless of the source of their income or the form in which it is received. To preserve a neutral tax treatment of labor income, the substance of the current provisions dealing with cross-border flows should therefore be preserved rather than replaced with an exemption system.

One question omitted from the above discussion, though, is whether entrepreneurial income *should* be taxed at the same rate that applies to wage and salary income. If labor effort that generates intellectual capital also generates positive externalities to others, since the protection of intellectual property is inherently limited, then a case can be made that entrepreneurial activity should be encouraged. Externalities plausibly arise from attempted innovations, whether successful or unsuccessful, so any tax subsidies should be linked specifically to entrepreneurial *risk-taking*. Only the most successful projects will result in foreign-source income. Allowing a lower tax rate on this foreign-source income, while leaving unchanged the tax treatment of less successful projects under the domestic tax system, then provides one mechanism for increasing the incentives for engaging in more risky entrepreneurial projects.³²

Another issue largely neglected in the above discussion is the effects of existing tax structures on migration decisions. When migrants choose a country in which to locate, they are in part choosing both a tax structure and a package of public services. The fiscal structure then discourages entry of individuals who are net payers, and encourages entry by individuals who are net recipients, relative to what these same individuals face in otherwise equivalent locations. Migration within the E.U., while less for example than that between U.S. states, is still nontrivial. The fiscal pressures are presumably greatest for those at the extremes of the income distribution. The richest individuals would be attracted to countries with the least progressive tax structure while the poorest individuals would be attracted to the countries with the most generous social safety-net expenditures. These migration pressures have largely been neglected in past discussions of the optimal personal tax rate schedule. Even after the thorough discussion of the taxation of

³² Cullen and Gordon (forthcoming) discuss other ways in which the tax system can encourage more entrepreneurial risk-taking.

international capital flows in the "International Taxation" chapter and our more limited discussion of the taxation of the return to entrepreneurial activity earned abroad, there are many further issues for tax policy arising from cross-border activity.

References

- Auerbach, Alan J. 1991. "Retrospective Capital Gains Taxation," *American Economic Review* 81, pp. 167-78.
- Auerbach, Alan J. 2006. "Why have Corporate Tax Revenues Declined? Another Look," N.B.E.R. Working Paper No. 12463.
- Auerbach, Alan J. and James M. Poterba. 1987. "Why Have Corporate Tax Revenues Declined?" *Tax Policy and the Economy* 1, pp. 1-28.
- Becker, Johannes, and Clemens Fuest. 2005. "Does Germany Collect Revenue from Taxing the Normal Return to Capital," *Fiscal Studies* 26, pp. 491-511.
- Cullen, Julie Berry and Roger H. Gordon. 2006. "How Do Taxes Affect Entrepreneurial Activity? A Comparison of U.S. and Swedish Law." Published in Swedish in *Entreprenörskap och Tillväxt*, edited by Pontus Braunderhjelm and Johan Wiklund. Stockholm: Forum för Småöretagsforskning.
- Cullen, Julie Berry and Roger H. Gordon. Forthcoming. "Taxes and Entrepreneurial Risk-Taking: Theory and Empirical Estimates for the U.S.," *Journal of Public Economics*, forthcoming.
- Desai, Mihir et al. 2002. "Dividend Policy Inside the Firm," N.B.E.R. Working Paper No. 8698.
- Devereux, Michael P. and Rachel Griffith. 2003. "Evaluating Tax Policy for Location Decisions," *International Tax and Public Finance*, pp. 107-26.
- Gordon, Roger H. and James R. Hines, Jr. 2002. "International Taxation." In *Handbook of Public Economics, Vol. 4*, edited by Alan J. Auerbach and Martin Feldstein. New York, Elsevier, pp. 1935-95.
- Gordon, Roger H., Laura Kalambokidis, and Joel Slemrod. 2004. "Do We Now Collect Any Revenue from Taxing Capital Income?" *Journal of Public Economics* 88, pp. 981-1009.
- . 2004a. "A New Summary Measure of the Effective Tax Rate on Investment." In *Measuring the Tax Burden on Capital and Labor*, edited by Peter Birch Sørensen. Cambridge: MIT Press.
- Gordon, Roger H. and Joel Slemrod. 2000. "Are 'Real' Responses to Taxes Simply Income Shifting between Corporate and Personal Tax Bases?" In *Does Atlas Shrug?*

