CASH FLOW OR INCOME?
The Choice of Base for Company Taxation

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Cash flow and equity income (or income) are two alternative bases advocated for taxes on businesses throughout the world. Although in practice most tax systems are hybrids with elements of both types of taxes, recent literature has stressed the merits of the cash flow tax because it is simple in concept and it does not distort decisions about capital expenditures and financing. But international issues and administrative complexities—particularly tax evasion—present problems that must be sorted out before a cash flow tax can be implemented.

The standard tax base for companies is corporate income: revenues from the sale of goods and services plus financial income, minus wages, depreciation, inventory costs, and interest (adjusted for inflation). In recent years, however, tax theorists and practitioners have expressed considerable interest in the use of cash flow as the tax base. The concept is simple: the tax base is the difference between the receipts from the sale of goods and services and the current and capital expenditures of the enterprise over a given period. If cash flow is used as the base, there is no need to calculate the tricky numbers that lie at the core of the standard tax on company income or to engage in complex accounting exercises to depreciate assets or correct for inflation. Only cash flow matters—real transactions, or transactions plus financial flows, depending on the definition adopted. No country has so far introduced the tax, except in isolated sectors of the economy.

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Much of the early literature (see, for instance, Brown 1948, who introduced the topic of the cash flow tax; Smith 1963) concentrated on the differing effects of cash flow as opposed to income taxes on incentives for investment and finance. It was not until the 1970s that the Meade report (Institute for Fiscal Studies 1978) and *Blueprints for Basic Tax Reform* (U.S. Treasury 1984) attempted a comparison of the relative economic merits of the two methods, especially with respect to efficiency, equity, and simplicity. But these and subsequent reports (Bradford 1986; Boadway, Bruce, and Mintz 1987; and King 1987) were written in the context of industrial countries and did not deal with the administrative, international, and transitional issues relevant to developing countries.

Although most countries use income as the tax base, in practice the fiscal definition of income rarely resembles the true equity income earned by the shareholders. For example, nominal interest is almost always deductible from the tax base, even though only the real (adjusted for inflation) component should be deductible. It is also interesting to note that since it is not easy to measure equity income accurately, cash flow methods (for instance, allowing deductions for research and development) are often used. Also, many tax systems in developing countries provide substantial tax incentives for capital. These tax systems are thus only nominally income-based. They are based neither on income nor on cash flow; instead, they are some sort of hybrid, often incorporating substantial tax writeoffs that subsidize the use of capital at the margin. The incentives include such deductions as accelerated depreciation, investment tax credits or allowances, and even tax holidays. These hybrid systems are more generous in their treatment of capital than are pure cash flow taxes since interest is deductible *and* capital is expensed (that is, capital expenditures are allowed as an expense in the calculation of tax liability). This double deduction for capital outlays encourages the use of capital and may mean that countries lose a great deal of revenue.

In the face of these complex and hybrid systems, many developing countries have adopted reforms to broaden the tax base and lower statutory tax rates. But while a central objective of tax reform has been to establish a duly defined income base, administrative limitations have been more serious than expected in some cases, and in others governments have lacked the political will to implement a serious and comprehensive tax reform. Policymakers in many countries are convinced that designing an income-based tax system that incorporates adjustments for inflation is too complicated, so they have concentrated instead on making sure that taxable business income reflects the book profit earned by the firm.

It is precisely because income taxes are difficult to implement—quite apart from their distortionary effect on investment and financing decisions—that some economists argue for the cash flow tax. Developing countries meanwhile contend that since business taxes are credited against the corporate tax bill in the company's parent country, the cash flow tax may simply transfer tax reve-

nues abroad. More important, policymakers fear that it would be difficult to implement a cash flow tax, and they are understandably reluctant to adopt a tax that has been neither tried in any meaningful way nor sufficiently well thought out for practical implementation.

This article evaluates the relative merits of cash flow and income as bases for company taxation. The principal concern is implementation: the appropriateness of a company tax ultimately depends on feasibility, even though other issues, such as economic efficiency, will play a role. What follows is an inventory of the practical problems of applying a cash flow tax compared to an income tax in developing countries. We start, however, with a brief review of the economic issues.

The Role of Corporate Taxes

Why should companies, which are merely legal institutions, be taxed at all? Why not tax the individuals who own the company? In other words, what is the economic role of the company tax? The choice of an appropriate tax base depends on the answer to this question. It may also depend on the relation between corporate tax rates and personal tax rates. A corporate tax can serve three economic functions.

The Withholding Role

The corporate tax serves as a withholding device on income that may be difficult to tax at the personal level. If it is desirable to levy an income tax on all forms of income, then capital gains (adjusted for inflation) should be taxed annually on an accrual basis. But it is difficult to tax accrued capital gains at the personal level because of the complexity of valuing nonmarketed assets and the problems for liquidity-constrained investors of paying taxes on an accrual basis.[1] A corporate income tax prevents individuals from deferring tax payments by leaving profits in the company rather than distributing them as dividends or interest. And it avoids the complications of assessing individual holdings in the company.

A second argument for using the corporate tax as a form of withholding arises when the personal income tax is consumption-based (or lifetime income–based). In this system the tax base is equal to labor earnings plus inheritances and claims on the economic rent earned by companies. Savings are exempt from taxes, and assets are treated in one of two ways: savings in designated assets are deducted from the tax base and the withdrawals from these assets are taxed (this is called the registered asset method), or interest on assets is tax exempt (the nonregistered asset method). With nonregistered assets, taxes on economic rent and labor income, unless withheld at the source, can be avoided by paying out income in dividends or in other forms of

capital income that escape taxation. Thus if a lifetime income tax is desired, a cash flow tax on companies can be used to tax economic rent and nonwage labor income.

A third argument for establishing a corporate tax is that the tax revenues in question could otherwise accrue to foreign investors and their parent governments, leaving little income in the host country.

Taxing Economic Rent

The most efficient tax—that is, one that entails the least reduction in welfare for a given amount of revenue raised—is one that applies to economic rent. Economic rent from an activity is the excess of payment over the compensation required for the activity to be undertaken. If such a surplus exists, taxing it would not distort decisions about production and investment at the margin, since the compensation required for the activity is already accounted for.

For a company, economic rent is the surplus of revenues over wages, interest expenses, and the imputed cost of equity financing. (Note that this amount is less than the accounting profits of the company since the latter do not include a deduction for the imputed cost of equity financing.) When economic rent is taxed, decisions about investment and financing are unaffected since the firm can deduct the true opportunity cost of capital and labor from its tax base. The cash flow tax, therefore, operates as a simple tax on economic rent, since allowing firms to write off capital expenditures is equivalent, in present value, to a deduction of the true depreciation and financing costs. (The cost of risk is implicitly deductible too, as long as tax losses are fully deductible or refundable.)

Economic rent is the return to fixed factors of production (that is, those whose use cannot be changed in response to economic circumstances). Some of these factors may in fact be supplied by the government, and the company tax can therefore be seen as a legitimate price for these services. The government could extract these payments by auctioning off rights (for the use of public property or of government-owned nonrenewable resources, for example). The cash flow tax is an alternative that serves as a proxy for such payments.

Economic Policy

Another perspective on the company tax is obtained by considering the general problem of raising revenue at minimum efficiency cost, particularly when it is administratively difficult to tax certain commodities or activities. Leisure is a prime example. In this case, it may be efficient to tax commodities or activities that are complementary to those that cannot be taxed. If current saving and accumulation are complementary with leisure in later years (perhaps in the form of early retirement), an argument can be made for taxing

companies, to the extent that individuals accumulate wealth in the form of capital gains on investments. Of course, other taxes may also be used to tax commodities or activities complementary to leisure (such as second homes or pleasure travel). Other activities may be untaxed as well, depending on the extent of integration of the economy, the size and nature of informal markets, and the state of tax administration. For some of these, there may be additional arguments for taxing companies.

In addition, a company tax can be used to offset the effect of market failures. For example, there are some activities, say pollution, that the government wants to discourage and there are others, such as research and development, that it wants to encourage. Fast writeoffs, investment tax credits, and rate reductions are used to encourage investment in particular assets and industries.

In principle, tax incentives play a role. They are, however, so difficult to apply that other policy tools, such as grants, may be preferable. Tax incentives make tax laws more complicated and, unlike grants, make it difficult to monitor the response of investment in the sector affected. In their favor, tax incentives are more easily put in place than are grant programs, since firms do not need to apply for the benefits.

Integrating Company and Personal Taxes

Since company income eventually accrues to individuals, differences in the company and personal tax systems can distort market decisions. Moreover, these differences allow for tax arbitrage, as different kinds of income or costs are shuffled for maximum tax benefit rather than for maximum economic return. To overcome these effects, the two tax systems should be as closely integrated as possible.

Is the choice of tax influenced by these considerations? It is often argued, for example, that a cash flow tax can operate only in conjunction with a personal consumption tax. It is not true, however, that the tax bases must be analogous from the outset: appropriate crediting arrangements, whereby taxes paid at the company level are reimbursed once the income is paid out to individuals, can accomplish the same thing.

It is possible to levy an income-based tax on companies with a personal consumption tax on individuals by, for example, allowing a dividend tax credit for the taxes paid by the company. In a closed economy such integration can be achieved easily. In an open economy, however, the tax credit makes company taxation less attractive, since tax on the income of foreign owners, which would otherwise be withheld, is captured by the foreign government. If, however, the tax credit is restricted to domestic shareholders, it may only subsidize savings without affecting decisions about production and investment, particularly in the case of companies that can finance capital from domestic and international sources.[2]

Similarly, a cash flow tax can operate along with the standard personal income tax system. Suppose all capital income is taxed at the personal level. Governments can now tax the economic rent earned by companies through a cash flow tax, without integrating the tax with the personal income tax. Something will have been lost relative to the case in which companies are taxed on cash flow and individuals on consumption, but if a consumption-based personal tax is not feasible, this is the next best alternative.

Thus integration itself should not be an insurmountable obstacle to reform. Much can be achieved through appropriate changes to existing personal tax systems. This is not, however, to minimize the benefits of integration. As noted earlier, lack of integration can lead to economic inefficiency and can aggravate many problems of implementation, such as compliance, the observability of the tax base, and the treatment of tax losses.

Implementation

In implementing a company tax, officials must consider two administrative issues: first, the observability of the tax base and second, the complementary problems of tax evasion and tax avoidance.

The Observability of the Tax Base

The measurement of the tax base by the firm and by the tax authorities is more difficult under an equity income tax than under a cash flow tax for the following reasons:

- The concept of income requires revenues and current costs to be reported on an accrual—rather than a cash—basis. This creates a problem in the determination of tax liabilities when income is generated after input costs have been deducted, for instance, in construction projects, discoveries of natural resources, and capital gains on property.
- Capital gains create a particular problem. In principle, accrued capital gains (or losses) should be taxed (or deducted), but these calculations can be monitored in only a few cases, and then only imperfectly (through adjustments in the provisions for depreciation). Even the use of realized capital gains, already a substitute, is subject to problems of measurement.
- Depreciation (valued at replacement costs after deducting real capital gains) is difficult to measure, especially in countries that have thin secondary markets for capital.
- The treatment of inventory inputs or outputs is a continuing problem. Filers must resort to simple ad hoc rules to allocate the true economic cost.
- In principle, a good equity income base requires adjusting interest deductions for inflation. Filers must report not only interest costs but also the

value and composition of debt liabilities. This can be a difficult task that requires detailed accounting.

- It is impossible to measure depreciation on such assets as research and development, advertising, depletable assets, and other capital expenditures. These items are thus expensed on a current basis in most tax systems.

With a cash flow tax, all these problems essentially disappear. The use of sales minus purchases (or variants that incorporate financial flows) eliminates any role for the concept of economic costing, thus ridding the tax administration of the need to deal with questions pertaining to the timing of benefits, inventory, depreciation, and capital gains. Capital gains and depreciation in particular virtually disappear as legal concepts and headaches as all purchases are simply deducted in full when made and no record of the transaction is necessary. Any subsequent capital divestiture is then treated as taxable revenue. Inflation adjustment also becomes unnecessary, since there is no need to take deductions on interest.

New problems do, however, arise. The immediate deduction for plant and equipment, although technically desirable and similar to any other business expense, can give rise to tax evasion and yields an exceedingly lumpy profile of tax obligations. In these cases the government may need to adopt special provisions to avoid abrupt increases in a firm's tax liabilities. Taxation of financial institutions is difficult as well because most revenues and outlays are financial flows to which the tax may not apply (for administrative reasons), and the costs of equipment and materials technically create a negative cash flow. Since no country has so far implemented the tax, lack of precedent and experience makes it difficult to predict other administrative difficulties.

Thus it is not clear whether a cash flow tax is superior to an income tax from the point of view of tax administration. The cash flow tax is preferable in that the definition of the tax base for most of the productive sectors is straightforward—a useful consideration in developing countries, where accounting and administrative capabilities are typically modest. But there are serious problems in the treatment of certain major sectors and in the interface with the individual income tax. It is not clear which system has the advantage. But tax policy goes beyond the demands of accounting. Another consideration is whether the tax system is subject to abuse if it should become easier to conceal income.

Avoidance and Evasion

Tax avoidance and tax evasion arise in two situations. First, the difficulties noted earlier in measuring and monitoring the tax base enable taxpayers to understate their incomes. Second, some activities cannot be—or simply are not—taxed. A considerable amount of legal tax avoidance takes place this way, as resources flow toward these opportunities. These gaps also generate outright

evasion through the use of such mechanisms as transfer pricing, by which the firm arranges to take high profits in a low-tax area, or leakage, by which a firm can shift income to activities that are favored, such as exports, rather than claim it under domestic sales, which are taxable.

"Tax losses" are another important mechanism for avoidance and evasion. When the company's operations record a loss, the tax treatment of these losses raises important economic issues. It is argued that such losses should attract a tax credit or refund. In this manner the refundability of the tax is an implicit deduction for risk; the government shares the firm's losses and gains. Refundability is generally accomplished by allowing the firm to carry forward losses (at a specified interest rate) to offset its tax liability when times are better. If the firm is liquidated it is entitled to any tax credit owed to it.

The tax treatment of losses is not a serious issue, provided different sectors and activities are taxed evenly across the economy. The problem arises when income can be shifted from taxable to tax-exempt or other favored activities. For example, suppose a firm writes off a capital investment as an expense, sustains a loss, and receives a tax credit. If the firm can shift income to nontaxable companies, such as pension funds, the tax credit essentially subsidizes the acquisition of capital. Transferring losses to an entity that has positive tax liability is only one example of the ways firms use loss provisions to minimize taxes.

Given loss offset provisions and the uneven tax treatment of companies, which tax is better? A loss is more likely using the cash flow base, because current and capital expenses will typically exceed revenues while the company is growing and investing. Although the effect can be mitigated by alternative provisions (such as including financial transactions in the calculation of cash flow or allowing depreciation rather than deduction of capital costs), important losses will occur in the early years of an investment. This suggests that the cash flow tax may make avoidance easier. Evasion may also be easier because revenues from the cash flow tax are less constant than are those from the income tax because of the lumpiness of investment outlays. Furthermore, the unevenness of revenues from the cash flow tax makes increased arbitraging more likely. For example, a company that has no tax liability because of a large investment outlay can collude with an affiliate to boost its (nontaxable) revenues through transfer pricing. Similarly, a firm could build up tax credits by taking advantage of loss provisions (and other tax breaks) after an investment and then dissolve and sell to a tax-exempt firm at the point where cash flow becomes positive. The value at which assets are sold is much harder to police than are the operational accounts.

One could, however, overemphasize the potential for tax evasion. Evasion is equally possible under income tax through the reporting of capital gains and interest, the timing of asset sales and inventories, and the treatment of compensation to workers.

International Policies

International tax policies affect the decision for two reasons. First, capital—especially new capital—is quite mobile and will find its way to the most hospitable investment. And second, the firm's income is also mobile. Corporations shift profits from one country to another by rearranging financial assets and liabilities without moving real resources. And, by taking advantage of differences in tax regimes across countries, multinational corporations minimize their payment of corporate taxes on worldwide profits by taking deductions in high-tax countries and reporting income where tax rates are low. This avoidance is partly controlled through international tax treaties.

Countries compete not only for capital but also for tax revenues. For the purposes of this article, we are concerned about two questions. First, which tax is best: an income tax that retains tax revenues from financial outflows and remittances, a cash flow tax that may be more effective in attracting the marginal foreign investor, or some other tax or combination of these? Second, to what extent can a country follow an independent tax policy? Must countries adopt by law—or accept in practice—essentially uniform tax policies? If a country pursues a different tax system, what provisions must be adopted to ensure that the tax is implemented properly?

The answers to these questions depend on the nature of capital markets and the size of the country. A large country can influence interest rates on international securities to its advantage and can use tax policy to this purpose by altering international capital flows. For example, if the country is a capital importer, a tax on investment that lowers the international demand for capital forces down interest rates. But most developing countries are small players in the international capital market, and it is unlikely that they can influence international interest rates or product prices. A corporate tax in developing countries alters the margin of decision for foreign investors, and the government has to balance its revenue needs against the possible distortionary effects on foreign investment in the country.

TAXING COMPANIES IN AN OPEN ECONOMY. Tax policy in an open economy must address the respective taxes on the income of foreign companies and on the income earned abroad by domestic corporations. Here we concentrate on the former, which is more important for developing countries.

The effects of a tax on the income of a foreign company depend on how the company's income is treated in the parent country. If the parent country exempts the income earned abroad, a cash flow tax base is preferable because an income tax will distort choices at the margin and will give the host country less investment for given revenues raised.

There are cases, however, in which the parent country does not exempt the income earned abroad but does allow the firm to take a tax credit. In this case, the criterion for evaluation is again which tax will provide more investment for

given revenue or, equivalently, more revenue for given investment. Under such circumstances a tax on repatriated income is preferable, since the company's tax credit leaves it free to invest regardless of the host country's tax regime, and the cash flow tax would open up a margin of distortion between the tax paid in the host country and the credit it received in the parent country.

In practice these tax arrangements are quite complex. For example, Japan, the United Kingdom, and the United States all grant credits for foreign taxes on repatriated income—dividends, interest, and royalties. When income retained abroad by a subsidiary is exempt from taxes in the parent country, the host country should levy an income tax on repatriated earnings but should tax retained profits in terms of cash flow. The administrative complexities of such arrangements are clear, but the point is that the choice depends on the tax structure in the rest of the world. Currently, income taxes in host countries qualify for tax credits, but would a cash flow tax qualify?

UNIFORM TAX STRUCTURES. Reforms in the company tax have been remarkably similar across countries. Most countries have lowered corporate tax rates and broadened the tax base by reducing tax incentives. The rationale is that countries are forced to follow the tax reforms adopted by others to preserve the tax base. But given the multidimensional nature of tax policy and the many other relevant instruments at hand, is it impossible for a country to pursue an independent tax policy?

It is argued that if there are differences in tax systems, capital will flow to the least taxed country. This argument is largely unconvincing. It is truer, if anything, as a statement about the level of taxation than about the structure. Although political pressure might persuade developing countries to levy the same tax used in foreign jurisdictions, there is no clear economic justification for this decision. Even if capital is relatively mobile, tax regimes could differ depending on the structure, the use of tax revenues, and the reliance on other tax instruments. If, for example, a country imposes high tax rates and offers many incentives, internationally mobile capital will avoid investing in taxed sectors. But the country may attract resources in the sectors it wishes to promote. Similarly, leaving aside the issue of crediting, a small open economy might find it in its interest to levy a cash flow tax despite the decision by other countries to impose distortionary capital taxes. Moreover, if the company tax is an important source of revenue, a country might levy a higher capital tax to finance public expenditures. Although tax regimes might affect each other, uniform taxes are not necessarily a foregone conclusion.

The competition for tax revenues is a better argument for some degree of uniformity. The usual justification for uniform tax bases is that tax arbitraging gives multinational corporations an advantage over domestic firms. Transfer pricing, financing and leasing arrangements, and other tax planning devices can create serious problems. One argument against the cash flow tax or indexed income tax is precisely that no other trading partner has a similar tax.

If a country tries to implement a cash flow tax or an income tax with fast writeoffs and higher rates than other countries, several issues arise. First, such costs as overhead that can be quickly deducted or depreciated tend to be allocated to the country that provides the most generous incentive. It is also possible for the firm operating in a jurisdiction with a cash flow tax to lease capital to a parent or subsidiary in other countries, especially when those countries offer less favorable incentives to capital. Thus the cash flow tax could discourage investment.

Second, if interest deductions are limited to the real interest rate—or not allowed at all—a company could issue debt in countries that allow nominal interest to be deducted. If a number of intercorporate transactions are made to avoid further taxation, the debt could then be used to finance the acquisition of capital that uses the cash flow tax or the indexed income tax. This gives an advantage to large companies that have better access to international capital markets. The country that imposes the indexed income tax or cash flow tax, however, would find that multinational companies were financed more with equity than with debt, which leads to higher corporate tax revenues.

Third, if the tax rate is higher than other jurisdictions, there will be an incentive for multinational companies to underprice goods for export, particularly if the goods are sold to associated companies abroad. Interest, royalties, and lease payments on transactions between the parent and the subsidiary could also allow firms to shift profits to low-tax countries.

These possibilities for arbitrage also depend on how foreign-earned income is taxed. For example, transfer pricing may not work if foreign taxes are fully credited by the parent country and the corporation cannot exploit the difference in tax rates. The importance of these issues depends on the ability to devise tax systems that avoid eroding or distorting the tax base.

Transition between Tax Regimes

Transition from one tax regime to another raises two problems: windfall gains (or losses) and the effect on efficiency (that is, the tax system should not distort the allocation of resources in the economy). Avoiding any windfall gains or losses as a result of the imposition of a new company tax base is essential. Moreover, since business decisions are based on the tax system existing at the time, a retroactive change is destabilizing and runs the risk of eroding the credibility of the tax policy. In addition, tax policies that create windfall gains (or losses) for the public may be quite inefficient (or efficient). For example, if the government limits interest deductions to a real basis, with an indexed corporate income tax, or eliminates interest deductions, with a cash flow tax, firms that are leveraged will find their taxes are substantially higher because they had expected to continue to deduct the full nominal interest. The increase in tax is a one-time windfall loss to the company's shareholders. From the point of view

of the government, the additional tax revenue is economically efficient because the tax is raised without affecting the company's decisions.

The effect of implementing a new company tax system depends not only on the old tax but also on the desired treatment of old assets under the new regime. Old assets can be either exempted from tax changes or treated on the same basis as new assets. If old assets are exempted, they may increase in value if new assets are subject to a higher tax (or vice versa); if old assets are treated on the same basis as new assets, the old assets may be subject to a tax different from the one applied to new assets.

Transitional arrangements have an important effect on the amount of tax paid by the corporate sector. If a company income tax is replaced by a cash flow tax, the whole depreciable stock and outstanding debt of the corporate sector must be moved across fiscal regimes. One way to arrange the transition is simply to exempt old assets from the cash flow tax and retain the former treatment of old debt. This requires depreciating old assets on the same basis as before, which is not a major problem. It also requires retaining the deductibility of interest payments on the outstanding debt—but not on new debt. Of course the need to keep track of the different vintages of debt incurred by the firm allows unbounded manipulation by any creative tax accountant.

The simplest solution would be to permit firms to deduct all the remaining depreciation on old assets but to prohibit deductions on interest. The problem is that the time profile of deductions and debt repayment on any one investment is not the same. The gain on the one side may exceed or fall short of the loss on the other (from nondeductible interest). Some firms will face bankruptcy and others will claim inequities. Officials will have to compromise and improvise. Other methods might perform better economically or administratively, but there is no known painless solution.

The effect on tax revenues of a shift from income taxes to cash flow taxes depends on what happens during transition and on the existing income tax provisions. A cash flow tax that applies to new and existing assets could yield substantial tax revenues because old assets would no longer be granted depreciation and interest writeoffs and would be fully taxed if sold to other firms. If, however, the government exempts old assets, tax revenues could fall. In developing countries that offer substantial writeoffs for capital (for instance, Bangladesh and Malaysia) or offer tax holidays (Morocco and Thailand), eliminating the deductions for interest under the cash flow tax could raise substantial revenues. In other countries revenue could be lost, especially if the corporate tax has served as a rent-collecting device, with few fast writeoffs or tax holidays.

Conclusion

In implementing either an indexed income tax or a cash flow tax on businesses, officials must consider several variables, some of which have been

addressed in this article. The matters of efficiency and distribution, commonly discussed in the literature, are only two areas of concern. Further investigation, particularly of issues of administration and international compatibility, is required.

Some assert that officials should first determine the type of tax base and then worry about administrative issues. The motive for adopting a company tax depends in part on the type of individual income tax desired and on the degree to which a country may wish to withhold income from foreign firms. But the problem is whether a particular tax base can be effectively implemented if administration is weak and there are international complications.

In a closed economy, especially one that relies on a consumption tax at the personal level, the cash flow tax seems to be a simple and efficient corporate tax. It is relatively straightforward to administer and is neutral with respect to investment decisions. The income tax, in contrast, is inherently more complicated and has little to recommend it, apart from the fact that it is slightly more difficult to evade.

A more fundamental problem, however, is that lack of experience with the tax means that it is impossible to predict what administrative and operational difficulties would occur. A great deal of preparation preceded the introduction of the value added tax in a few countries several decades ago, and other countries only seriously considered adopting it after a fair amount of experience was available. If uncertainty is a cost in economic decisions, this factor must represent a sizable minus from the point of view of the cash flow tax in the developing world.

Another problem is the way the tax fits the international economy. In this context, a case can be made for a tax on income. If the country has a large foreign-owned sector, the income tax may be the best way to withhold income from foreigners. The tax is credited against foreign taxes and so, in certain circumstances, has little effect on investment. Income taxes are used in other countries, minimizing the possibility of tax arbitrage. The income tax, however, is—or becomes more—distortionary to the extent that it is not credited abroad. And sometimes, as in the case of petroleum and mining royalties that serve as taxes on rent, the income is not credited against foreign taxes. This could make the case for a cash flow tax more persuasive. If there is no crediting, the cash flow tax has the virtue of being neutral, while still withholding rents accruing to foreigners. In contrast, a value added tax is paid only by residents of the country. To this extent a countervailing argument can be made for a cash flow tax in an open economy as well.

We have argued that no pure case can be made for either cash flow taxes or income taxes. While cash flow taxes are clearly simpler in design, their administration is clouded by international issues. For developing countries that rely on company income taxes that already include fast writeoffs for capital, the cash flow tax may be attractive in eliminating generous deductions for capital.

How the cash flow tax would work in an international environment, however, is a question that requires more analysis.

Notes

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1. Auerbach (1988) suggests some possible schemes for assessing taxes on capital gains at the time of sale that would be accrual-equivalent by taking into account the value to the investor of postponing realized capital gains taxes by holding assets longer.

2. Computing the *base* for inflation is complicated under income taxes; it is not an issue under cash flow taxes because they always measure costs and revenues in dollars contemporary to the tax due. Although the cash flow base does not have to be indexed for inflation, it is necessary to index tax obligations, especially in countries with high rates of inflation, because the lag in paying the tax will reduce the real value of the payment.

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