

## 2 What's Fair?

### The Problem of Equity in Taxation

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Equity in taxation is important for both principled and practical reasons. Citizens have, in general, the right to expect "fairness" in public policy, including taxation. As well, since tax systems perceived to be "unfair" tend to be resisted with special intensity, such tax systems tend to generate less revenue, and have higher administrative costs, than tax systems that are perceived to be "fair." However, it is not immediately obvious what a "fair" tax system would look like. Section 1 of this paper, therefore, begins with four real-world tax examples rationalized by differing concepts of "equity." Section 2 then discusses what is meant by taxation and the realism of considering fairness in taxation in isolation from transfer payments, regulation, and other government activities. Section 3 cautions readers against premature presumptions of "trade-offs."

Since society is continually changing, the passage of time affects the concept of equity in taxation, as well as its practical implementation, as section 4 discusses. Section 5 then considers how one might define the tax-paying unit and the measure of tax-paying capacity so that the ideal of "horizontal equity" – that "similar" taxpayers should be treated in a "similar" fashion – could be satisfied. Section 6 examines the issue of user fees, then section 7 turns to the idea that "vertical" equity implies that taxpayers with greater ability to pay should pay more tax. Section 8 argues that if one wants to maintain equity between generations, one cannot ignore the impact of taxation on growth, capital formation, and the natural and social environment. Section 9 notes that the criterion of "fairness" must be applied both to the process by which income is distributed and to the outcomes

of that process – “equality of opportunity” is an important dimension of fairness. Section 10 offers concluding remarks.

## 1 Examples of Equity

The following four examples illustrate different dimensions of the concept of equity:

- The driver’s licence renewal fee is the same for all motorists, and of course is zero for all non-drivers. It would be considered unfair to charge some drivers more than others for licence renewal – the principle of “horizontal equity” requires that individuals who are in a similar situation should be similarly taxed. However, it is also considered fair to charge motorists a fee for the right to use the roads, while exempting non-drivers – an example of a “user fee.”
- Income tax rates increase as taxable income increases, because the principle of “vertical equity” implies that it is fair to require those with a greater capacity to pay tax to bear relatively more of the total tax burden.
- A “carbon tax” would tax fossil fuels in proportion to the amount of carbon dioxide released to the atmosphere on combustion. The goal here is “intergenerational equity,” since the accumulation of atmospheric carbon dioxide is believed to be responsible for the greenhouse effect and global warming. It is considered unfair for this generation to alter irrevocably the global climate in which future generations will have to live.
- School supplies are, in Nova Scotia, exempt from provincial sales tax. Reducing the tax barriers to education is seen as increasing “equality of opportunity,” and thereby improving the equity of the process by which individuals gain income.

## 2 Taxation and the Overall Impact of Government

Canadians make their contributions to the financial health of government in a variety of ways. We pay sales tax on retail purchases, customs duties on imported goods, premiums to the Unemployment Insurance Commission, contributions to the Canada Pension Plan, and fees for licences and university tuition – as well as provincial and federal taxes on our income flows, and municipal taxes on our stock of real-estate wealth. The finances of the state benefit both from payments made directly to municipal, provincial, and federal gov-

ernment departments and from payments made to agencies of government (such as school boards) and nominally private organizations (such as hospitals and universities), whose funding is largely derived from public sources. The ways in which these payments are labelled and routed is not the issue – a comprehensive concept of taxation would include all payments made to agencies of government, or to non-commercial government-financed enterprises.

Furthermore, the equity of the tax system really cannot be considered in isolation from other policy decisions of government. Explicit transfer payments to individuals or firms appear as expenditure items in the national accounts, and the visibility of such transactions is partly responsible for the growth of invisible “tax expenditures,” or conditional exemptions from taxation, which achieve the same redistribution of resources. In the area of personal income taxation, some tax exemptions have been recently converted to tax credits (for example, the deduction from taxable income for dependent children has been converted into a tax credit). If tax credits were made fully refundable, taxpayers with very low income would receive net payments from government. Indeed, many advocates of social policy reform have argued for a “negative income tax” in which transfer payments would be consciously integrated into the income tax system, since the current system of implicit taxation (i.e., the reduction in social assistance payments as earnings increase) can impose very high financial disincentives to increased labour supply.

In practice, the tax and transfer systems are inevitably closely linked – indeed, it can be argued that transfer payments are “negative taxes.” The net impact of taxes and transfers on individuals is the difference between payments made to and payments received from government. This net impact is relevant for equity purposes. Although some tax sources (such as a value-added tax) may be regressive, taking a higher percentage of the income of the relatively poor, the tax/transfer system as a whole may be progressive, if expenditures benefit primarily the less affluent (as in Sweden). In Canada, redistribution between income classes had historically come largely from government expenditures, since aggregate taxation has often been found (e.g., see Gillespie 1980) to be roughly proportionate to income received over much of the income range.

As well, governments often have to choose between the use of tax or transfer incentives and the use of regulation or other policies as a means of achieving desired social objectives. The fairness of a given tax system must be considered relative to the fairness of available

alternative policy decisions. One can cite many examples, from the taxation or regulation of polluters to the choice between tariffs or import controls, but anti-inflation policy is a particularly important instance.

In the 1970s, proposals for a "tax-based incomes policy" (TIP) were based on the idea that taxing increases in money wages and profits in excess of a statutory norm would discourage inflationary price increases. By many criteria of equity, a TIP would have been an unfair tax. This fact was widely recognized, and may be part of the reason why the TIP was never adopted. However, inflation also produces a redistribution of real resources between individuals, which many believe to be unfair. In the 1980s, the restrictive monetary policy that has, in fact, been used to contain inflation has also produced record unemployment, whose burden is unfairly distributed in the population. The fairness of a tax-based incomes policy has, therefore, to be considered relative to the fairness of alternative policy choices – either to let inflation continue to accelerate or to impose restrictive demand-management policies, at the cost of increased unemployment.

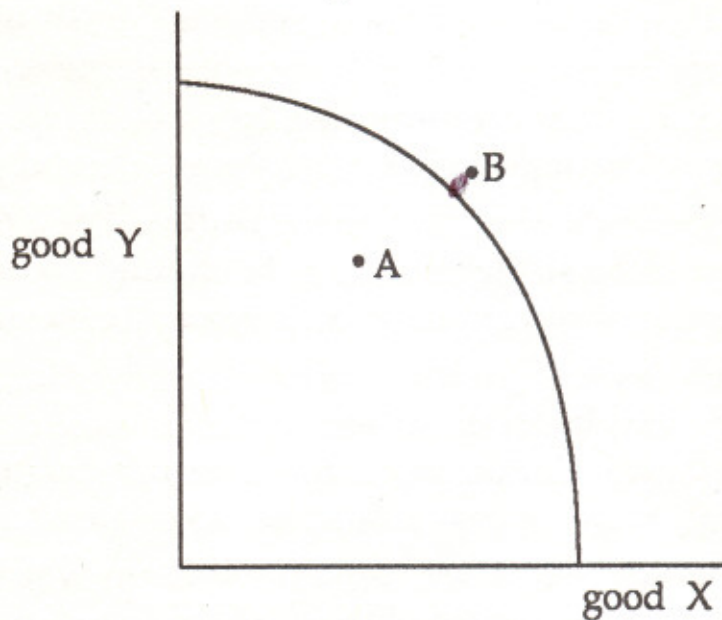
In short, taxation is an important part of the impact government has on society, but it is only a part. The equity (however conceived) of economic outcomes depends on all the decisions of government: demand management, spending, regulation, and taxation. It would be a mistake to emphasize fairness in taxation in isolation from the fairness of other policy decisions, or at the expense of all other considerations. However fair or unfair the tax system is, other policy decisions of government can either negate or accentuate its fairness.

### 3 The "Sometimes" Existence of Trade-offs

Since this paper has already discussed alternative policy instruments of government and will shortly consider alternative concepts of fairness, a word of caution is in order. The opening chapter of most introductory economics textbooks presents a diagram, like figure 1 here, in which a society is portrayed as being at a point, such as B, and the curved line is a "production possibility frontier," which is used to represent the idea that more of good X can be had only at the cost of consuming less of good Y. Like ducklings hatching from the egg, fledgling economists often imprint on the first thing they see, and continue throughout their professional lives to focus instinctively on the idea of "trade-offs."

However, despite the habitual reflex that leads some to speak of a trade-off between "equity" and "efficiency,"<sup>1</sup> the very same individ-

Figure 1



uals can sometimes be heard complaining about the inefficiencies of economic life, perhaps induced by government activity, which implies necessarily that society is at a point, such as A, i.e., not on the production possibility frontier. If there are inefficiencies in the utilization of economic resources, whether from the failure of markets or of governments, it is possible to obtain more of both desired goods. In the best of all possible worlds, there would be no such inefficiencies, and society would necessarily have to trade off more of good X for less of good Y, as at point B in figure 1. In the second-best world in which we actually live, however, there are many dimensions to economic life, and many sources of productive inefficiency.

It may be the case, for example, that sometimes there is a trade-off to be made between "horizontal equity" and some other dimension of equity. But it may also be the case that countries with more uniform tax codes have more efficient capital markets (because the allocation of capital is determined by economic productivity, rather than by tax incentives). If so, the greater "horizontal equity" will promote greater efficiency in the allocation of capital, and a more productive bequest of capital to succeeding generations. The habitual reflex of economists is to talk of "policy trade-offs," but one should not allow this reflex to replace the hard work of careful analysis of inefficiencies in the real world.

#### 4 Time and Fairness

Fairness in taxation has a time dimension, because social values and social realities change over time, because economic processes may

counteract inequities in taxation over time, and because the calculation and payment of taxes over time create significant practical and perceptual difficulties for the attainment of "fairness."

If social values changed only in degree, and not in kind, the issue of tax equity would be simpler. If, for example, social preferences for equality of family income were weaker in the 1980s and stronger in the 1990s, it would be straightforward to change tax rates to achieve the desired degree of income redistribution. However, changes in social values can also be more profound, and the very concept of "family income" can become problematic.

In 1966, the Royal Commission on Taxation argued that the incomes of all family members should be aggregated and taxed as a unit. The social context for this recommendation was a society dominated by single-earner households, in which gender discrimination was quite acceptable. It was, for example, considered fair for minimum-wage law in Ontario to specify different minimum wages for men and women (in 1964, \$1.00 per hour for men, and \$0.85 per hour for women). Over the past 25 years, the labour force participation rate of married women has increased dramatically and the social acceptability of discrimination has decreased even more dramatically. The adoption of a family income base for taxation implies that the tax paid on an additional \$1.00 of female earnings will depend on the amount of male income. The current debate as to whether this is "fair," or not, is very different from that engaged in in the 1960s.

The passage of time may also serve to counteract inequities in the current administration of taxation, because past inequities can become capitalized in current asset prices. It would be clearly unfair, for example, for a municipality to decrease property taxes for houses on the south side of every street. However, if a municipality did so, it would not take long before southern houses sold for more than northern houses in the real-estate market. The tax differential between southern and northern houses would become capitalized into housing prices (thereby benefiting the initial owners), but in equilibrium those who buy houses on either the north or the south side of a street will bear the same net total cost for housing. Once tax differentials are capitalized into asset prices, removing a tax break penalizes the current owners of capitalized assets, because they paid a price that reflected the expectation of continued favourable tax treatment – and they are likely to see the loss of their tax break as "unfair."

As the Meade Report (Institute for Fiscal Studies 1978, 14) argued: "From the point of view of 'horizontal equity' there is thus some truth to the view that 'an old tax is a good tax' but ... a committee which

is set up to consider possible improvements in a tax structure can hardly take as a working rule that whatever exists, simply because it exists, necessarily constitutes the best of all possible worlds." However, it is essential to consider which inequities of the tax system may already have been capitalized into differential asset prices when considering the equity of reforms to the current tax system.

Assessment of tax liabilities is one thing, but payment is another, and as the saying goes, "a tax deferred is a tax avoided." As well, although individuals may remain unchanged over time, the composition of families and of voluntary organizations is not necessarily stable. When the composition of tax-paying units changes, tax authorities have to be able to attribute equitably the tax liability of the unit to its underlying membership, while also avoiding the establishment of tax incentives to the artificial creation or dissolution of families and organizations.

There is always a time dimension to the administration of a tax system, since the taxation of a transaction (such as a retail sale) depends on when it is deemed to occur, whereas the taxation of a flow (such as income) depends on the specification of a time period of measurement and the taxation of a stock (such as wealth) depends on the assessment of its value at a particular date. In an inflationary environment, the measuring-rod of money values changes over time, creating particular problems for the taxation of the real value of capital gains and the real return on interest payments.

In an inflationary environment, money income received as interest payments is only in part a real return on capital owned – part is also compensation for the erosion by inflation of the real value of principal owned. If all interest received is taxed as income, inflation implies partial taxation of wealth, as well as of income. This may be seen as unfair, but it would also be very difficult to maintain the perception of equity in income taxation if part of interest income were exempt from tax, while all of labour income were subject to tax. Inflation implies, in general, that equal dollar values at the various times at which tax liabilities are calculated and then paid do not correspond to equal real values. The pursuit of both actual equity in flows of real resources and perceived equity in measured money values then becomes extremely difficult.

## **5 Horizontal Equity**

The principle of "horizontal equity" requires that similar tax-paying units should pay similar taxes, but to make this principle operational

one must define the tax-paying unit and specify the criteria of similarity. In personal income taxation, the tax-paying unit may be defined as the individual or the family. Similarity of such units may be defined in terms of similarity of ability to pay (wealth or income or consumption), similarity of need, similar degree of use of public services, or similar personal characteristics such as citizenship. All these definitional choices depend upon an underlying idea of fairness.

Some taxes (such as the retail sales tax) are inherently taxes paid by the individual purchaser, but there has long been a debate on whether it should be families or individuals who pay income or wealth taxes. In 1966, the Royal Commission on Taxation argued that "in most families incomes are pooled, consumption is collective and responsibilities are shared. It should be an objective of the tax system to reflect this fact by considering families as taxable units. The ability to pay of the family, as distinct from the individual members of the family, must be recognized" (10). Advocacy of family income taxation combines an ethical statement about "ability to pay" as a criterion of tax equity with an empirical statement about social reality, i.e., the actual degree of pooling of income and consumption within families.

How much inequality is there within families? Is it any concern of the state? In the 1960s, intrafamily inequality was presumed to be minimal, and there may have been, in addition, an attitude that state decision making should not intrude upon the sphere of family life. In the 1990s there is a greatly increased consciousness of social and economic inequalities within families and a recognition that taxes and transfers typically do alter the intrafamily distribution of economic resources (see Apps and Rees 1988). Unfortunately, however, in both the 1960s and the 1990s there is very little reliable empirical evidence on the precise degree of inequality in the intrafamily allocation of resources (Gronau's 1991 article is an example of recent literature).

There is one model of family behaviour and one type of tax system in which the distinction between families and individuals does not matter. In Becker's (1981) theory of the family, the altruistic/dictatorial family patriarch optimally allocates the total resources of the family among family members. Differing tax rates may affect the supply of paid labour of various family members, but not the final distribution of consumption. However, as a descriptive model of social reality, this picture has always been of questionable legitimacy – as well as being normatively offensive to many people.

Alternatively, if income tax were a fixed percentage of all income, with no deductions or exemptions, it would make no difference to



families whether the family or the individual was defined as the tax-paying unit, since the total tax bill would be identical. However, a purely proportional income tax would conflict with the ideal of "vertical equity," i.e., progressive tax rates that increase with greater ability to pay.

Despite increasing instability of the family unit, the social reality is that most Canadians continue to live in families that provide for many of their most important needs. In addition to their private command over market income and wealth, individuals do have claims on other family members, for both non-marketed goods and services (which are untaxed) and financial transfers. Currently, non-market cash transfers between family members are sometimes taxed and sometimes not. Gifts and inheritances are not taxed as income in the hands of recipients, but alimony and child-support payments are considered taxable income of the recipient (and are deductible from the taxable income of the paying spouse). The taxation of alimony and child-support payments is an illustration of the complexity of the interaction of taxation rules and social institutions since similar cash transfers made within an intact family would not be taxed as income of the recipient. Although the total tax payable by an intact family is greater than the tax payable by a split family (since support payments are deductible from the taxable income of the higher-income separated spouse), the lower-income separated spouse bears a larger share of the total tax burden. A fair-tax commission cannot ignore the complexities introduced by these social realities, or their fiscal implications.

The argument for a purely individualistic tax system is partly ethical (that individuals should be treated as individuals) and partly empirical. How large is intrafamily inequality compared with interfamilial inequality? Real inequalities within the family will be measurable only by differences in personal money incomes if collective family consumption (e.g., the amenities of housing) is relatively small and if intrafamily transfers of resources are minimal. However, family expenditure data indicate that neither statement is particularly realistic. And one must remember that interfamilial inequality in Canada is quite large – the average income of the top 20 per cent of families is approximately 6.5 times greater than the average income of the bottom 20 per cent of families – hence the degree of interfamilial inequality is considerably greater than any reasonable estimate of the degree of intrafamily inequality. For this reason, those who are primarily concerned with greater equality of consumption tend to remain convinced

of the merits of family income as a base for income tax and for transfer policy.

Given the definition of the tax-paying unit, one criterion for "horizontal equity" is that those with an equal ability to pay should pay a similar amount of tax – but what is "ability to pay"? Some discussions of taxation appear to be based, at least implicitly, on the idea that "ability to pay" is really about the utility taxpayers receive, after the payment of tax. Although economists typically assume that utility is non-comparable, there are some allowances made for "need" in tax administration. The Income Tax Act allows us to deduct medical expenses, and the Carter Report advocated that, in general, the tax system should recognize "special responsibilities and non-discretionary expenditures." The implicit idea is that people with these needs derive less utility from a given income and hence should pay less tax.

However, economies of scale in household operation (such as the sharing of rent or other fixed expenses) also imply that individuals who cohabit with others derive greater utility from a given flow of money income, and are therefore "able" to pay more tax. Individuals who enjoy their work have more utility, after taxation, than do similar people who hate their jobs. Although some researchers (e.g., Kapetyn, van de Geer, and van de Stadt 1985) have tried to use polling data to measure the subjective burden of taxation, "equal sacrifice" is not a practical ideal for the tax system.

It is ultimately the subjective burden of taxation that matters, both for behaviour and for well-being, but it is neither feasible nor desirable to use "utility" as a measure of ability to pay. If taxpayers knew that their own reports of the pain of tax payments might affect their tax liabilities, one might reasonably expect their squeals of anguish to mount in volume, to dramatic heights. As well as being impractical, it is also unethical to use actual individual well-being as the criterion of "ability to pay." It is hard to argue that individuals with expensive tastes should be taxed more lightly because their personal-subsistence standards are more expensive or, equivalently, that those with low consumption expectations should pay more tax.

However, if actual subjective individual well-being cannot be the basis for assessing tax-paying ability, what should be? Advocates of consumption taxation argue that those who withdraw more from the social stock of available goods and services have greater ability to pay tax. Critics note that taxation of consumption, rather than income, implies that savings are not taxed (at least, until they are spent). Individuals have control over whether income is saved or consumed;

hence, income is a better measure of the change over time in an individual's potential command over goods and services. By this criterion, those with equal ability to pay are those with equal incomes. However, if income is defined as "the maximum value a person can consume during a period and still be as well off (as wealthy) at the end of the period as he was at the beginning" (Hicks 1946, 75), wealth still remains. An individual's wealth is his or her total potential stock of command over goods and services at a particular time – it can be argued that those with "equal ability to pay" should be thought of as those individuals with an equal stock of wealth.

The social reality is that individuals and relatively low incomes consume most of it, while wealth and high income are positively correlated. As a result, arguments about "vertical equity" are the subtext for this debate on how to define "horizontal equity." Moreover, one should not think of any of these concepts of the tax base as easy to administer in practice. We have the most experience at trying to define "income" for tax purposes (which is, in itself, a good reason for keeping income as the tax base), but "consumption" is at least as ambiguous a concept, and "wealth" has a number of alternative definitions, in practice.<sup>2</sup>

Given the definition of tax-paying units and the tax base, one must also face the fact that, in Canada, government operates at several levels – municipal, provincial, and federal. In a purely unitary state, there would be a single tax schedule for all parts of the country and a single level of provision of all public services. However, when sub-national and subprovincial jurisdictions provide public services and set their own tax rates, an equal rate of tax may not be horizontally equitable. If, for example, schools are financed from local property taxes, an equal rate of tax would imply that towns with greater total assessment could finance better schools than could towns with smaller local assessment. Families with rich neighbours, and those who live in towns with a substantial commercial real-estate base, would receive greater net benefits from government than those who live in poor areas – even if they paid the same rate of tax.

Horizontal equity can be maintained if tax revenue is redistributed between jurisdictions – as in school financing within provinces and in federal-provincial equalization transfers between provinces. As section 36 (2) of the Constitution Act, 1982, puts it, the purpose of equalization payments is to ensure that individuals receive "reasonably comparable levels of public services at reasonably comparable levels of taxation." The general point is that, in a non-unitary state,

"horizontal equity" requires financial transfers between jurisdictions to compensate for the differences between jurisdictions in taxable capacity.

In thinking of the "similarity" of taxpayers, fairness implies that some characteristics can be considered, but not others. Canadians would consider it grossly unfair, for example, if assessed taxable capacity under income tax were reduced for the adherents of some religions, but not others. It is equally clear that gender or race discrimination is considered unfair. However, it is considered fair for churches to escape property taxes, and Canadians do not appear to consider all ascriptive criteria to be irrelevant for tax purposes. Attitudes vary as to whether it is legitimate to discriminate in the taxation of non-resident foreigners, either directly as individuals or indirectly as shareholders in multinational corporations. As well, the Income Tax Act does now specify a tax deduction for those aged over 65. The presence of such features of the current tax system forces us to ask ourselves on what non-economic grounds it is fair to distinguish between tax-paying units.

## 6 User Fees

Ability to pay may be measured by consumption, income, or wealth, but in all these instances, horizontal equity is thought of as the idea that individuals with similar "ability to pay" should pay a similar amount of tax. An alternative basis for the idea of tax fairness is the idea of "fair exchange." If individuals use services provided by government, equity might be construed as requiring similar payments from individuals making a similar degree of use of government-provided services. "User fees" are, in fact, very common in Ontario, in areas from motor-vehicle licensing to the paying of university tuition. Such fees are occasionally differentiated somewhat among users (as in lower tuition fees for senior citizens), perhaps based on the implicit idea that the favoured group has lower incomes, and a lower-dollar price for that user group may still reflect a similar degree of personal sacrifice.

Nevertheless, it is more normal for user fees to be equal-dollar charges for all the consumers using a public service. Although there is a grey area of special fees for incremental services (e.g., the extra charge for a private hospital room), it is hard to make a general case that user fees are more "voluntary" than other forms of taxation.

As always, the degree to which an action is "voluntary" depends

on the attractiveness of available alternative possible actions. Although one can escape buying a driver's licence by not driving and one can avoid paying university tuition by not going to university, one could also escape customs duties by consuming only domestic goods and it is possible to avoid paying income tax by becoming a subsistence farmer. The attractiveness of not driving depends, in part, on the quality of available public transportation, and the attractiveness of buying only domestically produced goods depends on how close they are to imports in price and quality. The quality of one's options determines the "voluntariness" of a tax. User fees can discourage frivolous use and/or wastage of publicly provided services, but whether they can be typified as a "voluntary" tax depends on the facts of the issue.

Moreover, fundamentally the fairness of the criterion of "fair exchange" as a general rule depends upon the fairness of the original distribution of income and wealth. After all, the fair exchange of a dollar's worth of commodity for a dollar in cash will leave both rich and poor where they initially were in total-wealth terms – the issue of vertical equity will remain unaddressed.

In contemplating user charges for public services, it is also worth recalling why these services are publicly provided and subsidized. Bus fares are subsidized in Canada because it is cheaper and less polluting to subsidize public transit than to build vast networks of superhighways for the individual automobile commuter. Education is subsidized because a more educated citizenry is a productive resource for the economy as a whole. Public provision of services is often motivated by the externalities that consumption of these services entails – the whole point of public provision, and the efficiencies it generates for a society as a whole, are lost if user fees are required to cover the total cost of operation.

## 7 Vertical Equity

To put it plainly, the principle underlying "vertical equity" is that the rich should pay more tax than the poor, because they can afford to. By this criterion, one of the objectives of the tax system should be to progressively increase tax rates as ability to pay increases so that the distribution of after-tax income will become more equal. To this end, in the 1950s and 1960s it was common to observe a very high rate of nominal taxation on upper-income groups – but some cynicism was also in order. As the Carter Report commented, "the top marginal

rate is now about 80%, and applies to income in excess of \$400,000. In our opinion, rates as high as this are on the statute books only because they are readily avoided by most of the few people with incomes of this size" (1966, 21). Their own recommendation was for a reduction in the top marginal tax rate to something less than 50 per cent and a comprehensive reform of the myriad of tax-avoidance techniques, which implied that the average effective tax rate on the extremely wealthy was in fact no higher than for those with much lower incomes. Subsequently, this theme – of broadening the base of income tax while decreasing top marginal rates – has been picked up in a number of other countries (see Head, this volume). However, although it is clear that marginal tax rates of upper-income groups have been cut substantially, it is not so clear that a substantial number of tax-avoidance techniques do not remain.

As had already been noted, the definition of the tax base and the tax-paying unit interact with the issue of vertical equity. In a progressive income tax system, the aggregation of two small individual incomes into a larger family income will imply an increase in tax liability. Similarly, if the objective is to tax consumption, taxes administered at the point of sale (like the retail sales tax or the goods and services tax) will constitute a constant percentage of all consumer expenditure, but since the savings of upper-income groups will escape taxation altogether, upper-income groups will pay a smaller percentage of their income in tax than will lower-income groups.

However, the taxation of consumption could be made progressive if consumption were defined as income minus registered savings and if a progressive rate of taxation were applied to consumption, thus defined. Although the current tax treatment of Registered Retirement Savings Plans (RRSPs) goes part of the way to converting our income tax into a consumption tax of this type, the administration of a full-fledged progressive consumption tax has all the administrative difficulties of an income tax, plus the capital-market distortions and administrative complexities of policing the flow of savings.

Although it can be argued that the ultimate basis of individual well-being is lifetime command over resources, it is not feasible to use lifetime income as the tax base. After all, by the time it is known what an individual's total lifetime income actually is, it is too late for taxation. Income flows must necessarily be taxed on a shorter-period basis, and our customary accounting period has been annual. One must recognize, however, that a progressive tax on annual income implies some redistribution in consumption over the life cycle (com-

pared to a proportional tax) since the lower-income years of youth and retirement attract a relatively low rate of income taxation, compared to the peak-earnings years of middle age. At any time, therefore, a progressive tax on annual income means that the middle-aged tend to pay more tax – a situation that might be seen as unfair in any given year, but is perfectly equitable from a life-cycle perspective.

In addition to predictable changes in income over the life cycle, individuals face random, year-to-year variations in their income flows. The tax system enables individuals to smooth out such variability in income flows by income averaging, by allowing the offset of capital gains and losses, and by permitting the limited “parking” of income in RRSP’s. More fundamentally, in the tax/transfer system as a whole, the state is a “co-adventurer” in the fortunes of individual taxpayers. Governments share in the gains of individuals through progressive taxation, but the state also mitigates any losses that occur, through a declining tax rate in income tax and the possibility of social assistance. To some degree, therefore, one can justify a progressive annual income tax and social assistance on efficiency grounds, since their absence would imply that risk-averse individuals would tend to “play it safe” even if, on average, there were a net gain from risk taking.

However, the most important reason for progressive income taxation is undoubtedly the moral value of greater equality – but this has never been seen as an absolute value. It has long been recognized that a tax system which aimed at absolute equality would produce equal poverty, since absolute equality can be produced only by confiscating all above-average incomes. As Dalton (1935, 21) noted: “The rejection of crude egalitarianism does not take us far, though there are some who seem to think that, when they have disposed of the argument for absolute equality, they have disposed also of all arguments for reducing existing inequalities.”

However, what is “greater equality”? Although it is easy to say that more for the poor and less for the rich means more equality, the real world is not composed of only two income classes. Once one allows for the fact that the tax system may redistribute resources both between the rich and the middle class and between the middle class and the poor, the concept of “equality” becomes much more ambiguous.<sup>3</sup>

Table 1 presents an illustrative calculation of tax choices in a society in which 20 per cent of the population is rich, 60 per cent is middle class, and 20 per cent is poor. It assumes that this society has to find some way of financing a total tax burden equal to 23 per cent of pre-

tax income, and presents two stark alternatives.<sup>4</sup> In Tax Regime 1, all tax revenue is raised by taxation on the middle class; in Tax Regime 2, all individuals pay exactly the same proportion of their income in tax. Which tax regime produces a more equal distribution of after-tax income? Which tax regime is "fairer"?

TABLE 1  
An Illustrative Tax Policy Choice

|                        | Rich   | Middle | Poor  |
|------------------------|--------|--------|-------|
| Number                 | 20     | 60     | 20    |
| Pre-tax income         | 84,000 | 60,000 | 8,400 |
| Pre-tax income share   | 30.8%  | 66.1%  | 3.1%  |
| Tax regime 1           |        |        |       |
| Tax rate               | 0      | 0.35   | 0     |
| After-tax income       | 84,000 | 39,000 | 8,400 |
| After-tax income share | 40%    | 56%    | 4%    |
| Tax regime 2           |        |        |       |
| Tax rate               | 0.231  | 0.231  | 0.231 |
| After-tax income       | 64,580 | 46,120 | 6,460 |
| After-tax income share | 30.8%  | 66.1%  | 3.1%  |

The numbers in table 1 were picked so that the after-tax income shares of the population under Tax Regime 1 would roughly correspond with the actual distribution of money income among Canadian families and unattached individuals in recent years. Under Tax Regime 1, where the middle class pays all the taxes, the richest 20 per cent of the population is better off, but so is the poorest 20 per cent. If one judges fairness solely by what happens to the well-being of the poorest members of society (as advocated by Green [1992]), then Tax Regime 1 produces a fairer distribution of after-tax income. However, some might also regard as "fair" the idea that all individuals pay the same percentage of their income in tax, as in Tax Regime 2, despite the fact that this implies that the poorest 20 per cent of the population gets less income, after tax.

Table 1 is not intended to suggest that the tax system has only these two choices. Presumably, the job of a fair-tax commission is to design a tax system that is better than either a flat tax, or one that "soaks the middle class." Table 1 is intended to suggest that there are fundamental ambiguities in the measurement of economic inequality, and in the concept of tax fairness, which revolve around the



relative importance placed on inequalities between each level of the income distribution – e.g., the inequalities between the very poorest and the middle class of society and between the middle class and the more affluent.

The difficult issue is the degree of tax progressivity that best expresses society's balancing of the values of personal liberty, greater social equality, and growth/capital accumulation for future generations. Economics cannot specify such values. Economic theory can provide abstract models of optimal-taxation regimes, although such models are often highly stylized. Econometric analysis can dispose of some myths about the impact of taxation (for example, it is not true that higher income taxes imply substantial declines in hours of paid labour supply). Economics can also emphasize the constraints that the migration of labour imposes on the feasible policies of sub-national jurisdictions within a national labour market and the problems posed by capital mobility in global financial markets. It is, however, in the political arena that the problem of vertical equity is invariably "solved."

## 8 Intergenerational Equity

Fairness and equity are central to the discussion of intergenerational issues because power is so unavoidably unequal. This generation can affect the welfare of future generations by running down the capital stock, or by despoiling the environment, but there is nothing future generations can do to us. Our decisions, individual and collective, are necessarily shaped by our norms of "fairness" in intergenerational distribution, and many of the decisions made by this generation will affect the welfare of future generations. Specific taxes (such as the proposed carbon tax) can help to shift consumption and production away from environmentally damaging processes. Specific features of the corporate tax system (such as accelerated depreciation) can improve incentives for investment in plant and equipment, and specific changes in individual taxation may encourage saving (e.g., a shift to consumption taxation rather than income taxation). Specific transfers (such as family allowance or social assistance) will influence the health and skills of vulnerable members of the next generation. And not only will particular taxes affect capital formation, the aggregate tax burden will also affect the rate of economic growth and aggregate capital formation. Furthermore, if taxes are insufficient to cover gov-

ernment expenditure, an increasing deficit will burden future generations of taxpayers with debt repayment.

The bequest of the current generation to future generations is composed of:

- a physical capital stock of plant, equipment, and public works;
- society's intangible stock of human capital in individual, productive skills, and its intellectual capital of research and technology;
- the quality of the natural environment;
- the social environment within which economic processes operate; and
- net financial indebtedness to foreign residents.

The physical capital stock accumulates over the generations as individuals decide to invest in housing and in directly productive capital, and as governments decide on the repair or renewal of public infrastructure. Human capital is accumulated as schools develop the skills of each new generation and as parents contribute to the education of their children. Both individually and collectively, we also make decisions with environmental implications for future generations – such as our decisions on the use of fossil or nuclear fuels. And all our economic decisions take place within, and depend upon, a framework of social institutions. The “social capital” of our society will erode over time to the extent that norms of social behaviour (e.g., of law-abidingness or of non-violent conflict resolution) break down or to the degree that the pressures on family life prevent the family from fulfilling its historic social functions of socialization, nurturance, and economic security.<sup>5</sup> The tax system influences all these processes. How much weight should be placed on each of the different components of intergenerational transfers? The aggregate value of intergenerational bequest is affected by taxation decisions, both in their detail and in aggregate. What is a fair allocation of aggregate resources between this generation and future generations?

There is one economic model in which government does not have to worry about intergenerational equity. Barro (1974) argued that, if individuals care altruistically about their descendants (who, in turn, cared about their own descendants), the issue of intergenerational equity is internalized, over generations, within families. If individuals recognize that a government deficit incurred today represents deferred taxation, these forward-looking, altruistic individuals will leave their descendants an increased bequest of private assets, in order to enable

them to pay their future tax liabilities. In this scenario, government decisions to decrease taxes and increase deficits are offset by increased private savings – the net bequest to future generations always remains optimal.

If one does not accept this vision of reality (and most economists do not), intergenerational equity poses real problems. No longer can one divorce issues of equity and efficiency, since a tax structure that is inefficient in maximizing the rate of growth of aggregate output will bequeath a smaller capital stock to future generations. The total magnitude of taxation, relative to expenditure, becomes an equity issue, in the sense that deficits accumulate and become a debt burden on future generations. And since bequests to future generations come in a variety of forms, the effect of detailed aspects of taxation on the environment; on society's acquisition of human capital; on continued social cohesion; and on the continued accumulation of plant, equipment, and public works become dimensions of the issue of fairness in taxation.

## 9 Process Equity

One concept of fairness holds that an outcome is "fair" if it has occurred as the result of a process that is "fair."<sup>6</sup> Economic inequality, in this view, can occur only if economic processes are inequitable – hence, a fair-tax system is one that acts so as to maintain the fairness of economic processes and/or eliminate any unfairness in economic processes. Should a fair-tax system, therefore, differentiate on the basis of how income was acquired? The Carter Report argued, on grounds of both equity and administrative efficiency, that "a dollar is a dollar," and that, if the primary basis for taxation is to be income, the origin of such income is irrelevant for taxation purposes. Implicitly, this argument says that all the processes by which a dollar is acquired are of equal fairness. As well, the commission emphasized that differential taxation of income sources creates incentives to reclassify income flows (thereby increasing the administrative costs of the tax system) or to redirect economic resources to low-tax activities (thereby decreasing aggregate economic efficiency).

The perspective of the Carter Report was influential in persuading Canadian tax authorities to begin taxation of realized capital gains in 1971 – although initially at only half the rate applied to income from other sources. The tradition of special favourable treatment for capital gains continued with the 1985 introduction of a lifetime exemption

of \$500,000 in capital-gains income (later reduced to \$100,000). Since income earned from labour, or by other means, has no similar lifetime exemption, the treatment of capital gains is horizontally inequitable. Since one has to have capital in order to have the possibility of making capital gains, the special tax treatment of capital gains benefits primarily the affluent, thereby contradicting the ideal of vertical equity.

However, appeals for unequal taxation may also be made on the grounds of process equity. A speculation tax on property developers has been discussed, partly motivated by a desire to check the inflation of housing prices, but partly also driven by the moral argument that it is unfair for some to make so much more by flipping properties than most individuals can make by continuous toil. Underlying this proposal is the idea is that the tax system should tax the utility gain of individuals, in the name of greater equality of sacrifice of utility. Since the worker gave up time and energy to earn money income, while the speculator did not, by the criterion of "equal sacrifice" it would be seen as fair to tax the speculator more heavily than the worker. However, another underlying idea is that speculative property gains are "illegitimately" acquired, in either or both of two senses. If land is in fixed supply, it can be argued that the activity of land speculation serves no legitimate public purpose. If real-estate profits are obtained by collusion and/or by manipulation of public officials (e.g., in zoning regulation), the market process may be seen as unfair. From either perspective, greater taxation of land-speculation profits may then be seen as improving the process equity of market forces.

More fundamentally, the taxation of inheritances raises the issue of the equality of opportunity, which is essential for the perceived process equity of a market economy. In contrast to most other nations, Canada does not currently have any inheritance or estate taxes,<sup>7</sup> since this tax field was deserted by the federal government in 1972 and thereafter destroyed by interprovincial tax competition. However, since the bequests received by an individual represent an increase in his or her command over economic resources, it would seem inconsistent with the principle of horizontal equity in income taxation that these bequests are not taxed as income. As well, the principle of equality of sacrifice would require higher taxes on bequests than on other income, since receipt of a bequest requires no exertion or risk from individuals.

If a capitalist economic system is a race for individual success, a basic norm of equity is that all individuals should start from approximately the same starting-line. Although it is well recognized that

families differ in the magnitude of their investment in the education and training of their children, such inequalities in endowment of childhood human capital are mitigated by a broad program of public investment in children, ranging from subsidized day care to free public schools and subsidized post-secondary training. Furthermore, inequalities in non-financial parental transfers to children are orders of magnitude smaller than differentials in financial inheritances – one must remember that at the top of the Canadian wealth distribution sit a few multi-billionaire families, but at the bottom are the approximately 30 per cent of Canadian families with nil or negative assets (see Davies 1991).

## 10 Conclusion

Both in principle and in practice, equity in taxation cannot be one-dimensional. In principle, one cannot, as a philosophical matter, logically derive all existing ideas of fairness from a common underlying root. The idea of equity as whatever a fair process produces starts from a very different philosophical basis than the idea that one should judge directly the fairness of outcomes. A desire for equity between generations cannot be logically derived from the idea of "fair exchange" or from ideas of horizontal equity.

In practice, general philosophical premises must also be combined with a particular understanding of the nature of the real world if one is to draw practical conclusions. Even if one believes, for example, that process equity is all that matters, one's view of profits taxation will depend on whether or not one believes that profits are typically obtained "fairly" in competitive markets or "unfairly," by price fixing in oligopolistic markets.

In practice, individuals also typically believe simultaneously in a number of different concepts of fairness, and the tax systems of countries express a number of different dimensions of equity. One should not see this as irrational. Since each of these different ideas of equity is deep and complex, it is entirely reasonable for an individual to hold a number of views simultaneously, and work out their detailed interrelationship only as and when required. Of course, the members of a fair-tax commission are placed in a position where they are asked to work out all interactions (both equity and efficiency) of all taxes. However, they have the solace of knowing that, in the end, the weighting of the different dimensions of equity will inevitably be political, not logical. To some extent, political compromises within

the commission will produce a report that does not reflect exactly any one individual's view of fairness, but is a composite of the views of all members. The political pressure of the interest groups outside the Fair Tax Commission will ultimately determine which parts of the report governments will adopt. However, a fair-tax commission can also make a real contribution by identifying those inefficiencies in the existing tax system that prevent the attainment of more of several objectives.

Moreover, in emphasizing one or another dimension of equity in taxation, one should not think of the tax system in isolation. The expenditure side of government is, for example, crucially important to "vertical equity." Indeed, precisely because the poor have so little to tax, variations in their tax rates are less important to them than the flows of public services and financial transfers they receive from government. In part, the Carter Report's emphasis on horizontal equity in taxation was derived from the belief that a non-distortionary tax system is likely to imply a higher rate of economic growth and a greater taxable capacity, from which public services and transfer payments can be financed. Such a perspective is also consistent with intergenerational equity, in the sense that faster economic growth implies a larger capital stock for future generations and increased ability to pay for the social programs that maintain our social cohesion, and the environmental programs that protect our natural heritage.

## Notes

The first draft of this study was prepared for the Ontario Fair Tax Commission and was completed in February 1992. The comments of Allan Maslove, Shelley Phipps, and the participants in the workshop of the Fair Tax Commission, Toronto, 26 February 1992, have greatly assisted the revision process. Errors remaining are my own.

- 1 Usually it is very unclear what is meant by "equity" and "efficiency" in this supposed trade-off. This paper discusses the ambiguities in the idea of "equity" – see section 7 for a discussion of the ambiguities in "equality."
- 2 Should "wealth" include the present value of future pension receipts? Should it include the capitalized value of future royalties or earnings? For a discussion see Wolff (1991).
- 3 It has long been recognized (see Atkinson 1970) that ambiguities in the comparison of income distributions are very common – and these ambi-

guities are yet another reason for distrusting the cliché of an "equality/efficiency" trade-off. In technical terms, one can compare income distributions by plotting their "Lorenz curves" (which graph the total percentage of income received by the poorest X per cent of the population). If these curves never cross, then in one population the poorest X per cent always receives more of total income, whatever X is, and relative inequality is unambiguously clear. However, in the real world, it is common for Lorenz curves to cross, frequently more than once, implying that the answer to the question of whether the poor receive more depends upon who the poor are defined to be. See Davies and Hoy (1991).

- 4 To keep the calculation simple, table 1 assumes that raising and spending tax revenue does not imply any change in the pre-tax distribution of income. Allowing public expenditure to affect the pre-tax income distribution or accounting for the influence of changing tax rates on individual behaviour (e.g., savings or labour supply) only increases the potential complexity, and ambiguity, of the situation.
- 5 These ideas are developed further in Osberg (1992).
- 6 As Green (this volume, p. 95) points out, libertarian philosophers such as Nozick (1974) have used this argument as a defence of existing property rights, but the argument also implies that the tainted past of wealth acquisition (e.g., the acquisition of land titles in North America) deprives the current distribution of property ownership of moral legitimacy.
- 7 Some assets can be rolled over, untaxed, to other family members, but the capital gains on most assets are deemed to be realized on the asset holder's death. This is best seen as ending the deferral of taxation on unrealized capital gains.

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