Personal income tax: an economic perspective

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I. INTRODUCTION

All economic activity has as its basic aim the material improvement of the human condition. Economics is the study of that activity: of the behaviour, risks, uncertainties, institutions, structures, interactions and relationships which govern it. A system of taxation is one of the more fundamental institutions in any society, more so in a society supporting a money economy. Taxation touches all facets of economic activity by altering rates of return, enhancing and reducing incentives, and altering the total level of activity. The study of the economic effects of a tax system is, therefore, one of the more fundamental areas of interest to economists — even if, in the view of some, the economics of taxation might be said to be the study of the degradation of the human material condition.

This paper is an analysis of the personal income tax from an economic perspective. It proceeds by looking briefly at the development of such taxes, followed by an examination of the criteria for the design of a personal income tax and its components. By the nature of any social institution, the operation of a tax gives rise to compromises between conflicting objectives which are not often widely understood: some of these compromises are discussed. Finally, the paper concludes with a brief examination of some dynamic considerations.

II. DEVELOPMENT OF INCOME TAXES

The classification of taxes under the heading of "direct" or "indirect" is chiefly a legal one and has little relevance to the economic debate. The distinction in economic terms between taxes which are imposed on persons and those which are imposed on goods or transactions is a fine one. Most fiscal systems have developed from a system of excises, or import and export duties. This reflects the difficulty of imposing taxes in a less developed economy where literacy is low and trade in commodities is relatively restricted: where barter is the prevalent means of exchange and the penetration of the money economy is largely confined to the sector of the economy which engages in international trade.

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Under these economic conditions, ease, but not necessarily cost, of collection is the prime consideration in imposing taxes. Nice social considerations, such as equity or incidence, are given little attention. Taxes tend to be related to large and infrequent transactions such as the purchase of land or livestock, or to where documentation or inspection is required for other purposes, such as the regulation of trade. Excise taxes are imposed on necessities, or on commodities the manufacture of which can be closely regulated, such as alcoholic beverages. The forms of direct taxes which often operate in less developed economies are poll taxes, death or inheritance duties, and primitive income taxes based on a share of the annual harvest. Sometimes wealth taxes are based on land holdings or dwellings. Refinements of the latter include taxes on windows or hearths.

In a more developed economy, where the government takes on a greater responsibility for supplying goods, services and social and economic infrastructure, direct taxes take on greater importance. Income taxes in particular have developed as the prime instrument since early in the last century. The reasons for this are straight-forward. Personal income is a large fraction of the domestic product in any economy and makes an attractive tax base. As an economy develops, the incidence of paid employment grows, along with the documentation which accompanies developing social institutions — the registering of births and deaths, population censuses, electoral rolls and so on. Thus, it becomes easier to levy taxes on income. When paid employment is the prevalent form of activity which generates income, the imposition of withholding taxes splits the responsibility for gathering tax with a third person, the employer, under arrangements, very close to the way in which indirect taxes are customarily imposed. This greatly facilitates the use of income taxes as a regular source of income for governments.

Income taxes are also better able to take explicit account of the prevailing concepts of social justice, either by adjusting the tax burden according to some concept of ability to pay, or perhaps by going further and actively seeking to redistribute income according to some criteria. These considerations have become increasingly prominent in the present century and are most clearly manifest in progressive income taxes.

More recently, the interaction of progressive taxes and inflation has produced yet another effect which has made such taxes irresistable to governments around the world. The interaction between rising money incomes and marginal tax rates which exceed average tax rates results in tax revenue growing at a faster rate than the increase in incomes. This phenomenon, know as fiscal drag, has had a marked effect on the share of income tax in total tax revenue in most OECD countries. It has also enabled governments to finance more of the ever-present demands for increased services and transfer payments. This shift in revenue shares has, in some countries, been exacerbated by the low elasticity and narrow base of indirect tax systems, which has tended to result in revenue from this source growing more slowly than the base of the tax. Finally, the interaction between a progressive income tax and consumption can further depress indirect tax revenue. As incomes grow, income tax grows more rapidly and, as a consequence, disposable income and consumption grow more slowly. As indirect taxes respond to the slower growth in consumption, the rate of growth of revenue from this source is reduced.

III. CRITERIA FOR THE DESIGN OF PERSONAL TAX SYSTEMS

When looking at the design of any tax system, there are three sets of criteria to be borne in mind:

(a) Equity or fairness, which is concerned with the impact on people with similar characteristics (so called horizontal equity), or the impact on those on different rungs of the ladder (vertical equity);

(b) Efficiency, both in terms of meeting the primary objective of raising revenue, and of the effects of the tax on the allocation of resources and the pattern of economic activity;

(c) Simplicity and certainty, which involves ensuring that both those who must administer and those who must comply with the tax system can do so within the skills and resources available to them.

A. Equity

The market activities of taxpayers generate for them one or more incomes, but the distribution of those incomes is seldom the same as the distribution of human skills and talents in the population. Various theories which have been advanced to explain this income inequality are based on age, occupation, geographical location, personal preferences and market imperfections. Since incomes represent a command over the resources of an economy, they also represent a capacity to contribute to the funding of public activities. The questions of how well "income" as a summary statistic is measured, how well it represents taxable capacity, and how the tax burden should be allocated between those with differing capacities are crucial to examining the "equity" of a tax system.

There are two major principles which may be applied in allocating taxes:

(a) The benefit principle, which is more commonly known as "user pays". This is an extension of the fundamental economic theorem that, in his or her dealings in the market place, each individual balances his or her own private costs and benefits. The application of the benefit principle where goods and services are supplied by government would ensure that neither too many nor too few resources are drawn into the production and consumption of those commodities at the expense of other productive activities, simply because it is government which is the producer. In a similar way, the application of the benefit principle to the taxation of commodities such as alcohol and tobacco, where private consumption has high external social costs, would mean that society as a whole was not subsidising the users of those products. The principle is less useful, however, when each individual benefits from the collective provision of certain services, such as a judicial system and national defences, on which he or she may personally place little value. A benefit-based tax system may be progressive, regressive or proportional in nature.

(b) The alternative, ability to pay, approach, is based on principles of equal sacrifice. These have as their starting point a theoretical relationship between money income and what is called utility. Utility is a short-hand description of all the complex psychological forces which motivate individuals. Its definition is a truism: the individual maximises his utility and utility is what he seeks to maximise. Total utility increases as income increases but, after a while, each additional dollar of income adds less than the previous dollar to the individual's total utility. Since the last dollar is worth less to the individual than the one before, the taxpayer is in theory less reluctant to give it up in taxation. It is on this theory that progressive taxation is based: the first dollar of income is worth a lot to the taxpayer, so it is taxed relatively lightly; but the last dollar is worth little to him, so it is taxed more heavily.

Horizontal equity requires the same dollar of income to attract the same tax. Thus the fifth, tenth, hundreth, and so on dollar of a person's income should attract the same tax as everyone else's fifth, tenth, and hundreth dollar. In terms of vertical equity, a tax based on equi-marginal sacrifice would result in the loss of utility from the last dollar of tax being the same for all taxpayers.

The equi-marginal sacrifice principle is one which has found favour in the majority of countries with personal income taxes — often with spectacular results. In Tanzania, for instance, marginal rates climb to 95%, and to 80% in Jamaica, Portugal and Egypt. In practice, however, the principle is frequently lost. This is because, while the tax scale itself may be progressive, features such as narrowness of the tax base, regressive concessions, or income splitting may mean that few, if any, pay the tax rates in the scale. So an apparently progressive tax system may, in practice, be proportional or even regressive in its incidence.

The equi-marginal sacrifice principle itself rests on a number of assumptions, some of which are readily challenged. It would be a rare individual whose utility was a function of income alone, and not constrained or modified by normal physical needs such as sleep and recreation. Moreover, a figure representing an individual's income often tells us very little about the situation of that individual or about his or her capacity to pay. Two individuals, each earning the same and living communally, obviously have a higher taxable capacity than if only one of them was working. The question is, by how much? Is it exactly twice; less than twice, because they incur extra costs such as having to buy convenience food or employ a housekeeper; or is it more than twice, since the extra utility that their extra income can give is worth less to them? And what about the income which is never measured? The value-added in home production, such as bottling, cleaning, child-minding and gardening, is all income which the household effectively consumes. The household which must purchase these goods and services is at a disadvantage, since it pays for them out of money income which has attracted tax.

These problems are often intractable and as a result place a curb on the practical achievement of equity.

Finally, there is often confusion about whether the objective of a tax system is to achieve an equitable distribution of the tax burden itself, or to reduce inequality in the distribution of incomes. The two are not the same. It must be realised that it is possible for the tax burden objective to be in conflict with objectives regarding equality of incomes, since the latter must take in the effects of the widest span of government policy measures, from import protection through to education.

B. Efficiency

The efficiency aspects of taxation have two distinct facets: the cost-effectiveness in meeting the tax system's revenue raising objectives, and the impact of the tax system on the economy as a whole.

1. *Cost-effectiveness*

The operating costs of a tax comprise two elements: administrative costs, which are borne by the revenue authority; and compliance costs, which are borne by the taxpayer.

The cost-effectiveness of a tax is one of the elusive concepts which often defies quantification. The chief reason for this is the difficulty of estimating compliance costs, but objective evaluation of administrative costs also poses problems. To say, as is often done, that it costs 0.5 to one per cent of revenue in administration costs is totally misleading. For instance, if the tax rate were halved, would it therefore follow that the efficiency of the collection agency has also been halved? A more relevant statistic is the cost of collecting the last dollar of revenue. This is frequently the cost of inspection or audit teams in terms of the administrative costs, but again the compliance costs can be elusive.

Compliance with the tax laws has two facets. Compulsory compliance costs are the minimum required to satisfy the taxpayer's legal obligations. The other facet, voluntary compliance costs, are those incurred in the expectation of reducing or delaying the tax liability — costs associated with avoidance, evasion or the fuzzy crossbreed called "avoision" by some.

Because tax evasion is illegal, the domestic product generated by this activity is not normally recorded in the national accounts. A number of economists overseas have studied the size of the informal or "black" economy, which often goes hand in hand with tax evasion. Studies in some countries have produced startling results in terms of the level of total activity which officially goes unrecorded. The other startling result is that, often, small-time criminals — self employed and dealing in a service — will pay more tax than professionals in the normal sector. This is because tax concessions in the informal sector are fewer and the penalties for tax evasion are frequently higher than those for the crime which generates the income. It therefore makes sense for prostitutes and bookmakers to pay tax because of the relatively high probability of their arrest.

The design of the tax system itself will have a strong bearing on incentives to evade or avoid taxes. High marginal tax rates in any context are a powerful inducement to look for forms of untaxed income, or splitting and sheltering devices. There is a demonstration effect in these things. Evasion and avoidance practices developed in one country are often tried in neighbouring countries, and so on. The lesson is, however, that the lowest possible marginal rates on the widest base that can be defined will minimise both the incentives and the opportunities to evade or avoid tax. Similarly, if people perceive the tax system to be fair, they will be more willing to comply than if they believe, rightly or wrongly, that avenues for escape exist for some but not for others.

2. *Impact on economic behaviour*

The existence of tax means that the prices paid and received in respect of any economic transaction affected by the tax will differ: this is the so-called tax wedge. A personal income tax, for instance, means that the price received by an individual for his or her labour is less than the price paid by the employer for that labour. In a market economy, where production and consumption decisions are determined by producers' and consumers' reaction to relative prices, the tax wedge can have an important influence on the efficiency with which the economy operates.

Economists distinguish between two separate effects which taxation has in economic behaviour: the income and substitution effects.

(a) First, the income effect. Imposing taxes lowers disposable incomes, forcing taxpayers to decide whether the new reduced level is sufficient for their needs, or whether they should seek higher gross incomes to restore their former net incomes. There is a paradox here since if, for example, the government squanders taxes in a way which does not benefit a taxpayer, he still has an incentive to earn more provided his average tax rate is below 100%. On the other hand, if the taxpayer benefits directly from the government's spending, he may have an incentive to do no more for himself, or even to reduce his income from his own efforts.

(b) Secondly, the substitution effect. Marginal tax rates are generally considered to influence choices between work and leisure, and between different types of income earning activities. Since tax lowers the return from undertaking extra activity compared with the extra costs involved, taxpayers face reduced incentives. Accordingly, they may choose to substitute untaxed income producing activities or leisure for work. Similarly, they may choose to indulge in secure activities, offering a low monetary reward for less worry, rather than risky activities with the prospect of very high before-tax returns.

As with so many facets of economics, it is seldom possible in practice to identify clearly the income and substitution effects and to quantify their net effects. We can, however, say something about the nature of the effects on diverse economic choices.

Income taxes lower the rate of return on savings by the marginal rate of tax on the interest. If savings are motivated by a desire to postpone consumption, then the effects would be to encourage current consumption and reduce saving (the substitution effects). If, on the other hand, savings are goal oriented or "for a rainy day" (the precautionary motive), then savings may be increased by high marginal tax rates, especially if people believe that even heavier taxes may be levied in future (the income effect).

Taxes affect people's attitude to risk, although again the effects are ambiguous. Taxes may reduce living standards to such an extent that people are willing to accept extraordinary risks to restore their position (the income effect). Alternatively, taxes may induce people to conserve what little they have by investing in low risk, low return propositions (the substitution effect). Since the whole range of attitudes will be evident in individual investors, the effect will be to exert a bias on the range and type of investments chosen.

Taxes may also affect in different ways individuals' decisions to work. For instance, if average personal income tax rates are high, the income effect may dominate and either encourage the breadwinner in a family to work overtime, or the spouse to seek employment. Which course is adopted may depend on the marginal tax rate scale. A steeply progressive scale may encourage the breadwinner to earn less and the spouse to earn more. A relatively flat marginal rate scale may have the opposite effect. Thus, the supply of labour may be influenced, both in terms of quantity and type.

As a general rule, it can be concluded that low tax rates will have less impact on economic efficiency than high tax rates, and that uniform tax rates will have less effect on types or levels of activity than widely diverging rates. On efficiency grounds, therefore, the optimal tax is one which is levied on all closely substitutable economic activities at a low, uniform rate. In the case of a personal income tax, this would imply a low-rate proportional tax on a fully comprehensive base.

C. Simplicity and Certainty

Finally, the designer of tax systems needs to have regard to the administrative, legal, and compliance effects of what is proposed. Laws and legal practices change slowly, and are often not well adapted to communicating directions to the market place. Also, the implementation of complex tax proposals may be beyond the resources of taxpayers to comply with, or the revenue agency to enforce. Over the course of history, the demise of more taxes has been brought about by the unwillingness or inability of the authorities to enforce them than by taxpayer revolt.

Simplicity and certainty are key criteria. The taxpayer has a right both to know what he is liable for, and for that liability to be certain and not depend on the discretion of the revenue agency or rest on a fine point of legal interpretation. Ideally, the tax liability arising from a transaction should be able to be determined with certainty when the decision to undertake the transaction is made. When operating the tax system, a government should also be concerned to minimise the total operating cost, and not just its own costs of administration. There is a trade-off between compliance and administration costs which will achieve the least overall cost. It is worth bearing in mind that compliance costs are met directly by each taxpayer individually, while administration costs are met by all taxpayers according to the prevailing approach to the distribution of the tax burden. Furthermore, administration costs are regularly reviewed by the government as part of its normal expenditure control, but the costs of complying with tax laws and regulations are hidden and seldom examined.

IV. COMPONENTS OF TAX SYSTEM

A personal income tax has three fundamental components; the tax base (what is to be taxed), the tax unit (who is to be taxed), and the tax structure (how rates and concessions operate).

A. The Tax Base

The definition of income employed for tax purposes can be broadly or narrowly defined, and the timing of the assessment is also important. The fundamental problem of an income tax is the separation of income from capital, so as to leave the taxpayer in the same income earning position at the end of the tax period as he was at the beginning. A narrowly defined base may include cash incomes and gratuities which can be turned into cash. A more broadly defined base may bring in capital gains, while a comprehensive base would also include imputed incomes such as from owner-occupation of dwellings. A comprehensive base could also tax income on an accrual basis rather than on realisation, and allow the offset of capital losses against income. There are many possible variations, each with different economic effects.

B. The Tax Unit

The range of possible tax units is more restricted, the basic options being the individual or the household. The individual tax unit relies more heavily on "income" as the criterion for assessing taxable capacity than does a household concept and, as a result, is the most straightforward. The household options range from aggregation, through quotients, to splitting, with variations depending on whether voluntary entrance or voluntary escape is permitted. They may apply to the incomes of married couples, or to those of all members of a family household. Under these systems the household income is aggregated, then divided by a factor which is the number of splits allowed. The tax scale is applied to the resultant income and the tax so obtained multiplied by the same factor. Simple aggregation uses a factor of one, while perfect splitting between a couple would involve a factor of two. Variations on this theme may involve, for example, factors of 1 for the principal earner, 0.7 for each other adult, and 0.3 for each child.

Simple aggregation makes a progressive tax scale even more progressive for married couples or families, while splitting reduces the progressivity for those able to split.

Household tax units have been adopted from time to time in many countries, in an endeavour to improve the equity of personal tax systems in which ability to pay is the main criterion and where families are considered to be disadvantaged by progressive tax scales. The main disadvantages of such units are the complexity and the need to recognise either the imputed income of a non-working spouse or the additional costs incurred by two income families if true equity is to be achieved. Because of this, and of the increasing desire of women to be treated as economic units in their own right, the trend over the last decade has been towards the individual as the tax unit. The flatter the tax scale, of course, the less relevant is the choice of the tax unit from the equity viewpoint.

C. The Tax Scale

It is generally the marginal tax rate scale which most exercises the minds and imagination of tax commentators. In some ways it is unfortunate that scales are published in the form of marginal tax rates, since people come to believe that these are also their average tax rates. In this regard the West German tax scale has a number of advantages, since it is a polynomial which is continuous over much of its range.

Progressive scales are the most prevalent. The condition which has to be met to achieve progressivity is that the marginal tax rate exceeds the average tax rate. This can be achieved either by raising marginal tax rates on higher incomes, or by reducing them on the initial dollars of income, or both. Each achieves the same objective, although with different dynamic effects and costs. Since the first few dollars of everyone's income make up the biggest single slice in the income distribution, the rate of tax which applies to those initial dollars is a major determinant of the marginal tax rates to apply to the subsequent dollars. In other words, given a certain revenue requirement, the initial tax rate largely determines the shape of the tax scale as a whole.

It is often suggested that a basic tax free income ought to be given as a means of tax relief for those on low incomes. This can be disputed on pragmatic grounds. The person deriving the maximum benefit from a zero rate band, or a personal rebate, is the person with one dollar of income more than the allowance and the same absolute tax saving accrues to everyone except those with insufficient income to exhaust the concession. The greatest benefit from an exemption of income accrues to taxpayers on the highest marginal rate. Either is, in the extreme, a cost-ineffective measure and, in addition, subjects all those in the middle ranges to higher marginal tax rates. There appears to be a confusion in the minds of advocates of a zero step between the distinct concepts of the distribution of the tax burden and a more equal distribution of incomes, as was mentioned earlier.

The fundamental lesson is that the statutory rates are only the first step in examining the impact of a tax system. It is necessary to delve more deeply into the composition of taxable and tax free incomes and their distribution, as well as into the various institutions and structures, including concessions, before a full picture can be obtained.

V. TAX INCIDENCE

The question of who ultimately bears the burden of tax is one which greatly interests economists, although the actual analysis of tax incidence still faces intractable problems in terms of its application.

The statutory incidence of personal income tax is on the taxpayer. He or she bears the legal obligation, both to comply with the law and to pay the tax. He or she may not, however, bear the burden. For instance, the person who bears the obligation to collect and return sales tax has a legal right to shift the burden forward in prices, and does so if market conditions permit. The assumption that the full burden of personal income tax is borne by the taxpayer can be called into question. In the short run, it is unlikely that income tax will be shifted — just as it is unlikely that tax cuts will be shifted — but in the longer term labour supply will be responsive to higher or lower after tax incomes. Jobs attracting high taxes will attract fewer entrants and people will move to more lowly taxed jobs. If this results in a shortage of people in the more highly taxed jobs, then the resultant increase in gross wages to attract them back effectively shifts the extra tax on to the employer. It is this kind of mechanism that the "supply side" economists see working in the United States. Tax shifting is also possible if wage negotiations are conducted on the basis of a target take-home pay. In this case income taxes, and especially progressive taxes, will be passed on to the employer as a production cost. This altered incidence will be exacerbated if wages are negotiated on an industry or national basis, so that all firms face the same cost pressure regardless of their ability to absorb or pass on the extra costs. In such circumstances, income tax may have an important effect on the structure of the economy.

VI. THE ACCOUNTING PERIOD

Most income tax systems are based on an arbitrary fiscal year which may or may not fit the natural cycle of economic activity. Questions of the appropriateness of it chiefly centre around the concerns of businessmen and farmers about valuing stocks and the depreciation of fixed assets. It should be remembered that, for the vast majority of taxpayers, the relevant accounting period is a week, fortnight, month, or however they are paid. New Zealand, as with many countries, effectively operates two systems of tax assessment, the first being Pay-As-You-Earn and the second the annual assessment. The events that are deemed to take place after midnight on 31 March each year are for most people confusing, but largely unrelated to the contents of their pay packets. The Pay-As-You-Earn system assumes the current income for the pay period to be 1/52, 1/26 or 1/13 of the annual income, a figure which is seldom borne out in fact.

VII. CONFLICTS AND TRADE-OFFS

The key problem faced by all designers of tax systems is that the criteria often conflict. Thus, inevitably, tax systems incorporate a wide range of compromises. This is especially true of personal income tax systems where subjectivity is necessarily an important element.

Just as economic theory tells us little about the optimal level of government expenditure, and hence of revenue to be delivered by a tax system, so it is largely silent on the right balance between efficiency and equity. There will be as many views on the appropriate balance as there are economists. Nevertheless, most economists would argue that over-emphasis on equity can be counter-productive and that, in the long run, greater attention to efficiency considerations may well do more for the lot of these who are supposed to benefit from tax systems designed largely with equity in mind.

There is, fortunately, no conflict between horizontal equity and economic efficiency. The aim in both cases is to extract equal amounts of tax from, and impose equal marginal rates on, people with the same level of income regardless of source. The key question in both cases is how much income, not in what form it is earned.

There is, however, a very real conflict between vertical equity and efficiency. This paper has earlier discussed the disincentive effects of high marginal tax rates on productive effort and risk, and the incentives such rates provide for tax avoidance and evasion. And yet progressive tax scales, which almost invariably incorporate high marginal rates at some point, are generally considered necessary to achieve a measure of vertical equity. The compromise reached between these two conflicting objectives reflects the social and political attitudes ruling in the particular country at the particular time. Similarly, there can be conflicts between efficiency and equity criteria on the one hand and simplicity on the other. Most economists would argue, regardless of their brand of economics or politics, that to maximise both efficiency and equity the personal income tax base should be fully comprehensive: that is, that all forms of income — whether in cash or in kind, money or imputed — should be taxed alike. But such a system would be extremely complex both for taxpayers to comply with and for revenue agencies to administer. Thus, again, all personal income tax bases represent compromises between what is desirable and what is practicable. The question that has to be answered is whether the extra cost incurred in achieving the additional measure of equity or efficiency is worth it. The answer is largely a matter of value judgement: it differs from time to time, and from country to country.

There are also necessary compromises between certainty and simplicity. It would be possible, for instance, to design a Pay-As-You-Earn system in such a way that the weekly, fortnightly, or monthly tax deductions also represented the final liability. It would also be necessary, in such a system, to deduct tax from all forms of income at source. Such a system would tend to be costly to operate. With a progressive scale, it would be virtually impossible to ensure that the tax deducted at source from the various forms of income was exactly right. It would be more practicable with a proportional tax scale, or a schedular system where different forms of income were taxed at specified rates.

VIII. DYNAMIC CONSIDERATIONS

One thing economists are agreed upon is that an economy is a dynamic organism. The relationships within it are continuously changing and interacting with each other. Indeed, that is what the discipline of economics is all about. A snapshot of an economy at one point in time is a statistical exercise. How that economy changes over time is what economic theory attempts to explain.

The dynamics of a tax system are part of this. A personal income tax system is not a static thing. People's incomes are continuously changing, particularly under inflationary conditions. So, therefore, are the taxes paid on those incomes. The two interact. Under a progressive system and inflation, the increase in a person's gross income required to preserve his or her real after-tax income is greater than the inflation rate. This fact may add, for instance, to wage demands and so to inflationary pressures if those demands are acceded to. If, on the other hand, the demands are not acceded to, the resulting fall in real after-tax incomes may reduce inflationary pressures but also drive the economy into recession.

The dynamics are also important in looking at changes in personal income tax structures. When tax rates are changed, there is a tendency to examine closely the immediate effects on after-tax incomes of individuals in particular circumstances — even by economists. There is, unfortunately, less inclination on the part of commentators to look at what the position of those individuals would have been after a year or so, had the scale remained unchanged, or at the incentive or disincentive effects of the tax changes and the impact they may have on the welfare of the population as a whole.

IX. CONCLUSION

Economists are concerned primarily about improving the human material condition. Economic theory and analysis can throw a good deal of light on how best this may be achieved. They seldom, however, provide unequivocal solutions. Similarly, economists can tell us a lot about the effects that various forms and levels of personal income tax may have on individuals and the economy as a whole. As with all social sciences, however, the answers can seldom be precise.

This paper has identified the key criteria to be applied in designing personal income tax systems. In some cases the criteria conflict. Trade-offs result and compromises are inevitable. Economics seldom tells us what the optimal compromise may be. It does, however, enable us to analyse qualitatively, and sometimes quantitatively, the effects of various compromises and advise accordingly. In the end, the tax system adopted will depend on social and political priorities. As with economies, these are always adapting and changing.