WHAT TAXES SHOULD THERE BE? J A Mirrlees, Cambridge University. March 2000

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Taxes are Complicated.

I suppose taxes must once have been very simple, but long ago they became many and varied. Each country has its own system. Not only are the tax rates different, but so are detailed tax rules, like the definition of taxable income, the commodities that are actually taxed, and the way in which taxes are collected. I dare say that no actual tax system was designed by someone as the best of all possible tax systems. But at least their elements have been put together deliberately and thoughtfully. It is a challenging and interesting task to see if one can lay down some principles for good taxes, to try to deduce what should be taxed more heavily, and what less heavily; and even how high taxes should be. Economists, at least some economists, have struggled with these problems since the beginning, of economic science. I want to talk about some of what they have found. and about some ideas of my own. I shall be talking about a lot of different taxes. That implies that I do believe tax systems should be complicated, not simple. But some have argued, often passionately, that a particular simple system is right, and I want to talk about these ideas too.

Reasons for Taxes.

The first and most obvious reason for taxes is expenditure. If the sovereign wants to go to war, he will probably have to raise money by the exercise of legitimate power. Some sovereigns have been sufficiently wealthy to. manage without taxes, but they are the general rule. There are apparent alternatives: printing money, but that is effectively a tax on money holdings; borrowing, but that is just postponing taxation, at least if there is no default. Who pays the taxes? Generally the richer members of the nation (though in the French Ancien Régime, not the richest). There are several reasons. In the first place it is easier. In the extreme, you cannot take from those who have next to nothing. Secondly, the better off generally have more to gain from public services, even wars. Thirdly, it is right, or at least, as most would prefer to put it, it is fair.

I do not know how early the idea emerged and gained wide assent that it is intrinsically better to take from the rich than from the poor. The legend of Robin Hood is quite old. And it is indeed implicit in the judgment that more taxes should be raised from the rich than from the poor that redistribution from rich to poor is a legitimate end of government policy, and in particular of taxation. In the absence of public expenditure requirements, I suppose that the redistributive function of taxation (and subsidies) might not have arisen. But in the case of the Poor Laws in England, the expenditure in question was subsidies to the poor: it

was a system of redistribution, and not a small one either. No doubt other countries have had similar redistributive systems in the history of their governments.

The first reason for taxes is to raise expenditure, the second to distribute the burden of taxes, and the benefits of subsidies, fairly in the population. Increasingly we have come to recognize another principle that should influence taxes, that they should not create too much inefficiency in the economy. It is not inevitable that taxes distort the economy, but if they are fair, then they almost certainly do. This notion of distortion is actually a bit artificial. It says, essentially, that total incomes (properly measured) will go down by more than the taxes raised; but of course one person's income is not the same as another's, and their gains and losses ought not to be added to ether. The real point is that taxes will affect people's economic behaviour, and that could have bad consequences that should be taken into account. In other words, taxes affect incentives, as when high rates of tax on earnings can lead people to work less. There are different ways of taxing, and some lead to generally lower incomes than others.

In summary, taxes should raise sufficient revenue for the desired expenditure, should impinge fairly on people's incomes and wellbeing, and should not too greatly reduce total incomes. In fact there is an important trade-off to be considered. You could keep distortion low if you did not try to be fair. A high level of redistribution generally involves considerable distortion. This trade-off between equity and efficiency lies behind all the discussion of desirable tax systems that is to follow.

Simple Taxes: Land, Capital, Labour.

One idea is to tax land as much as is required for expenditure, or at least as much as possible. The tax would be a proportion of the rental income of the land. The merit of the proposal is that a tax on land does not distort economic decisions. Land is, in the economist's definition, anything whose supply is fixed: it cannot be made, and it costs nothing to make it available for use. Therefore, a tax on its earnings does not discourage the owner from making it available. The demerits of the proposal are considerable. It would be necessary to estimate the rent on land that is used by its owner; but that problem could be dealt with by adopting the essentially equivalent policy of having the government expropriate all land. Then all private use would involve rental payment, and that payment would be equivalent to a 100 per cent. tax. In most countries, even a 100 per cent. tax would not generate nearly sufficient revenue to cover public expenditure. Even in Hong Kong, where the State owns most of the land, income from land provides for much less than half of a relatively low level of public expenditure.

The real problem with the land tax is its incidence. The government cannot rewrite history so that the tax has always existed. It must be known at a particular time that it is going to be introduced. Then all land loses value by a proportion equivalent to the tax rate: those who pay are the people who currently own land. The tax is paid by those who happened not to foresee that the tax would be introduced. Others will have put their wealth into assets other than

land. No doubt there is something to be said for providing rewards to encourage foresight, but the impact of the tax is hardly fair.

It is not surprising that the idea of concentrating taxation on pure land rents is not widely popular. Perhaps the most obvious alternative is to tax all wealth. The idea of a universal capital levy is quite old, but seems to have been an idea to play with, not a serious proposal with significant political support or pressure. Yet in theory, at least on first consideration, it has great merits. A once-and-for-all tax on capital would transfer a proportion of the whole capital stock owned by the taxable population into the ownership of government. The revenues from public wealth should then pay for public expenditure. Even ownership of all the property at the date of the levy would probably not be sufficient to cover public expenditure throughout the future; so that more taxes would be required. Leave that aside.

The problem is that the capital levy must be unforeseen, for only then are incentives unaffected. Specifically, incentives to save will be much reduced if it is known that a large part of wealth will be taxed away in the future. 1 doubt whether it is possible for a capital levy to be unforeseen: there would be prior discussion. A continuing or repeated capital levy would certainly be foreseen. The paradox is that if we do not expect a capital levy, we should be able to reason that the government, if rational, will introduce it; so that we should foresee it and not save, so that there will not be much capital on which to levy the tax. And that will continue to be true each tax year. In fact, wealth taxes are unusual, when they occur they are small, and people do not expect a wealth tax to be introduced, and they are right.

The case for using a capital levy as the main or only tax is not strong. Granted that there will be incentive effects, wealth taxation is just one tax to be considered among all the other taxes that might be imposed. Presumably it should not be done at such a high rate that it covers all, or even most public expenditure. It is not a recipe for a simple tax system.

The tax system could be simple, easily. All income could be taxed at the same rate. A number of people have been urging that such a system be introduced. Since that would imply taking money even from the poorest, I suppose its proponents would have income- tax allowances, so that tax, would be levied on income above these thresholds. A more redistributive version would combine a single-rate income tax with basic income. The idea of a basic income, which has often been proposed, is that everyone in the population gets an unconditional payment, at a lower level for children. It would replace many special benefits, such as unemployment benefit, tax allowances, the minimum State pension, and disability and sickness benefits.

A system with basic income and a proportional income tax is indeed simple. It appeals to those who like things to be neat and tidy. It removes special exemptions and special treatment for interest groups for which there is no good reason. One would also guess that it would be cheaper to administer than current tax systems. It might not be popular with administrators' trade unions. The argument that costs of administration would be reduced is not unimportant, though costs of administering most of the main taxes are in many countries quite

low, relative to tax revenue, and would probably be little affected by most of the additional taxes and tax-rates we shall be considering. Otherwise, it looks doubtful that there is a real intellectual case that the simple system is the most fair and efficient system.

The simple tax system is not quite as simple as it sounds, or at least it needs to be specified more carefully. Income for tax purposes might be defined in a number of different ways. The simplest definition is the narrowest, that it should be labour-income only. That does seem to be excessively kind to the wealthy. If income from property is included in income, then it needs to be properly specified. What is to be done about capital gains? Should interest-income be adjusted for inflation. I don't know whether any country does a good job of that. Whatever is done, it is seldom simple. Once the distinction between income from labour and income from property is made, it is not at all obvious that they should be taxed at the same rate.

Taxing Simple People in a Simple World.

Economists can devise ideal, or optimal, taxes most readily in highly simplified models of the real world. One such model imagines that there is a fixed population of people, who live for only one period, consume just one type of good, and do just one type of labour. They differ only in how skilled they are, that is to say, in how easy they would find it to do a particular amount of work. There is no migration. The only kind of tax you can introduce in this model is an income tax (or a constant tax, the same for everyone). It is supposed to be impossible to observe directly how much effort people put into work, so more exotic taxes, such as a tax on the wage rate per unit of effort, are not available.

Even for such a simple model, there are contentious issues about how to express the criterion by which alternative tax systems will be judged, and about specifying realistic economic behaviour in a model that represents reality so imperfectly. Results vary considerably, depending on the specification. But some general features of the results are interesting. The most striking feature of most the income tax schedules recommended by these models is that they have falling marginal tax rates for most incomes, particularly for higher incomes. One would approximate such a recommendation by an income tax with different tax bands, the lowest tax rates being levied on the highest income bands. Quite often, the tax rates do not vary much from band to band; but the results are very different from most actual tax systems.

For some levels of public expenditure, particularly higher levels, the recommended income tax is quite close to the simple linear one, equivalent to a basic uniform subsidy combined with a proportional tax. For a version of the model I find rather believable, however, the marginal tax rate at low incomes should be much higher than for average to high incomes.

This first level of analysis of tax systems then gives only rather weak support to simplicity in the tax system. It supports having different marginal tax rates at different income levels, even if not in the way characteristic of actual tax systems.

How to Tax Many Commodities.

In reality, there are many different consumer goods that people buy. My main interest here is in the scope for taxes that this variety of goods provides, and whether we should have significantly different taxes on different goods.

There is a very interesting and important theorem about optimal taxation in an economy where there are many consumer goods. This is about an economic model very much like the one I was just describing, a timeless model where people differ only in the level of their labour skills. Atkinson and Stiglitz [Journal of Public Economics 1976] studied such a model with many consumer goods, and found that, with a particular assumption about people's tastes, there is no reason to introduce taxation of consumer goods at all: a labour-income tax does all that is desired. The assumption is that, given the labour they are supplying, different people have the same tastes for consumer goods, for food relative to clothes, housing relative to travel. This assumption can be given precise mathematical form, but I think the general concept should be clear. It may not be very easy to decide straight away whether it is a plausible and realistic assumption. I shall come to that. First 1 want to say something about the generality of the result, and also its applications.

This class of models assumes that people know perfectly the effect of their labour supply decisions on their earnings. Think of the model as describing people for their whole lives, so that labour supply would be measured by lifetime earnings, and consumption by lifetime consumer expenditure. Then it is not realistic to suppose there is certainty about the effect of all the important actions that determine earnings, for example acting education and training, choosing a career, and so on. Yet I have found that when one introduces earnings uncertainty, the Atkinson/Stiglitz theorem still holds.

It is a remarkably general result.

And it has many possible applications. The obvious one is that consumer goods should be taxed uniformly. Another is that income from savings should not be taxed. This idea goes back at least to John Stuart Mill, who claimed that it was undesirable to tax people for postponing their consumption, and that is what taxation of savings does. We can think of present and future consumption as two kinds of consumer goods. The Atkinson/Stiglitz theorem says there should be no tax discrimination between these two, and if there were a tax on income from property, there would be tax discrimination. So we seem to have a case for restricting taxation to labour income, provided the assumption that everyone has the same pattern of tastes for saving (given their labour). We shall come to some reasons for doubting that assumption. But what is more important is that the model assumed people did not differ in initial wealth. Any differences in wealth would be because people save different amounts during their lifetime. In reality, gifts, inheritance and windfalls seem to be important. One should not be too quick to apply the result to income from property.

Environmental Taxes.

I am now going to examine the case for taxing commodities as well as income, that is to, say for taxing commodities at different rates from one another. Of course there are arguments for taxing some commodities on environmental grounds. Petrol and fuel oils whose use generates greenhouse gases should be taxed to reduce emissions. An additional tax on petrol is also a convenient though somewhat inaccurate way of taxing people so as to represent the cost of the congestion experienced by other road users. There may not be many cases where consumption of a commodity has substantial external effects, but where it does, taxation can be a convenient way of improving matters. The tax revenue generated comes in useful: other taxes need not be so high.

Which Commodities to Tax Highly: One Theory.

There are other reasons for having differential commodity taxation. I want to argue that the assumption made in the Atkinson/Stiglitz theorem is not realistic. I want to go further, and suggest that we can hope to identify the commodities that should be taxed more or less highly. At the outset, it must be said that it is not all that easy to get good information about people's tastes as reflected in their demands for consumer goods. There are many good surveys of consumer demand now, and that is very helpful. But to find out about people's tastes, we need quite a lot of variation in relative prices, and it seems that history does not provide us with enough. Anyway, I am going to rely on more speculative or introspective way of knowing about consumer demand, and suggest that we can do something with that.

Make a working, assumption that the relative enjoyment or wellbeing people get from acts of consumption does not vary much with the amount of work they are doing or the skill they are exerting. There are some ways in which the consumption tastes of high-wage people seem to be typically rather different from the tastes of low-wage people, certainly, so that, even if they were to spend the same on consumer goods, their consumption pattern would be rather different. Museum-visiting, and the type of holiday chosen come to mind as plausible examples; but it would be hard to verify. I ignore these possible differences, and concentrate instead on an important distinction between acts of consumption, and consumer-good purchases. Gary Becker [Economic Journal 1962?] developed a theory of consumption in which he noted that many kinds of consumption take time, so that, in a sense a consumer has a time budget as well as a money budget. Consumer demands are generated by trying to do as well as possible within both time and money budgets.

Assume then - it is clearly true - that some kinds of consumption take more time than others. Even if relative tastes among acts of consumption are independent of the amount of free time they have, a time-intensive act of consumption, such as going on holiday, will take time that might have been used for work, while an act that is not time-intensive, such as wearing clothes, will not. Consequently encouraging longer holidays will have an effect on the supply of labour that encouraging the wearing of clothes will not.

Using these ideas, one can look at the question of optimal rates of tax again, and one finds it is optimal to tax commodities at different rates, these rates depending on the amount of time that is needed to use the commodity. One gets a nice simple formula, but I am avoiding formulae in this talk. The essential conclusion is that tax rates should be higher for consumer goods that are more time-intensive, in the sense that consumer-time use is high relative to their cost of production. This result is very reminiscent of a nice early result in optimal tax theory, due to Corlett and Hague [Review of Economic Studies 1953?]. They discussed optimal commodity taxes when there are two commodities and untaxed labour, and found that it was best to tax more highly the commodity that was, in a technical sense, more of a substitute for labour. That is just what we find in this model where there is general taxation of income, and a very precise sense in which some commodities compete with labour for time.

It is interesting to think about what kinds of commodities are more or less timeintensive. We want low taxes for commodities that use little time (like clothes) or even save time. What save time. I resist the idea that this is a case for subsidising fast cars. Here is a better set of examples. Consumer goods that promote health save or create time: they reduce time off work, and may lengthen the working life. Notice that this is an argument rather different from the usual argument implicit in proposals to tax unhealthy goods and tax healthy ones. It is based on the idea that people will not choose rationally for themselves, either because they cannot be effectively informed about the excellent properties of some commodity, or are psychologically unable to use the information. The case I am making does not assume any faulty information or calculation on the part of consumers. In fact, I do not think we are very well informed about what promotes health in the relevant sense. Not subsidising gymnasiums or sport, I should think: that kind of consumption takes time, and generates some injuries. Smoking almost certainly does reduce labour supply, so that we do have a rational argument for taxing tobacco.

Other commodities that might warrant lower taxes on this argument are skill-enhancing goods. At first sight, one might think that books are clearly time-intensive, and should therefore be taxed more heavily; but if they enhance skills - which is of course not at all certain in general - that may somewhat offset the tax argument. Education, though also time-intensive, should be skill-enhancing, and I conjecture that there is a case for subsidy here.

In the case of many consumer goods that take time to consume, such as restaurant meals, or food more generally, more expensive ones do not necessarily take any longer to consume. Interestingly, in Britain we have a specific tax on wine, which is so much per bottle, regardless of the price or quality of the wine. In general terms, that is what the argument implies, for food as well as drink: rather surprisingly, specific taxes, rather than taxes proportional to value, may be desirable.

One can speculate endlessly on the kinds of commodities that should be subsidised, or taxed at a lower than average rate. Consumption by people who are not working form a large and special class. In this case, one should have different tax treatment for people

above the retirement age, where for many commodities they should be taxed at a lower rate than younger generations. Whether that is practical is another question: I simply state the theoretical conclusion. In fact a number of commodities (museum visits and transport, quite often) have different prices for more elderly people. Now we have a possible rationale. At the other end of the age spectrum, goods for children are often not time-intensive, in the relevant sense. In Britain, children's goods are zero-rated under the value-added tax. Finally, childcare services and housekeeping services more generally are time-saving, and therefore warrant subsidy.

Taxing Savings and Wealth.

None of these considerations bear directly on the question whether there should be a tax on the returns to savings. Indirectly they do have an impact, for interconnections between consumer-good purchases and labour supply at various times mean that the assumption of the Atkinson/Stiglitz theorem does not hold. It is quite hard to draw any clear conclusion, though. Other considerations are perhaps more relevant. A particularly interesting question is how variations in the return to savings should be taxed. There are considerable variations from person to person in the rate of return they receive on their capital. It seems to be generally taken for granted that a tax on savings, if one is warranted, should apply to total income from capital, and be unaffected by the size of the capital base. I do not see why that is right. It is just possible that some of the variations in the return on capital are the result of the application of skill and effort; but most is surely the result of risky outcomes. To that extent, there might be advantage in a high tax on the returns, offset by a subsidy on the capital; for that would provide people with insurance against investment risks. When one then takes account of the redistributive element of taxation, there is the case for taxing wealth we have already alluded to. Putting it altogether, I suggest there is a case for a rather progressive tax on income from capital after all, with perhaps some small offset related to capital value.

Families; Gifts.

We have already found plenty of reason for variety and complexity in the tax system. There are many further aspects of taxation that I have not discussed. The tax treatment of families is one such, and raises many interesting possibilities and questions. Here I think it is attractive to be simple, by a treatment of families that is the same as the treatment of gifts between people. Any individual could make payments to other individuals, and all such payments would be treated as negative income of the donor, and as part of the recipients' incomes. The difficult question is: what kind of income is it? Is it like labour-income? Apparently not. Is it like income from property? Not very like that either. In the context of the family, with most income labour-income, it seems that tax reformers have wanted to treat the transfer as labour-income, so that the couple would share the income. If marginal tax rates were falling with income, then of course they would not share the income, but concentrate it so as to minimise tax. I lean towards treating these transfers like property income, but perhaps an entirely different method is best.

This treatment avoids getting into other aspects of people's relationships that we might also regard as gifts, such as one person doing housework for another. It ignores any argument that a gift might be a particularly good thing, providing an economic externality, because it gives pleasure to both the donor and the recipient. The same treatment could apply to legacies, but that would involve sometimes large recalculations of the donor's tax, expanding the legacies (which would then be taxed). This is not a simplification, and perhaps not the best way of handling inheritance. But it is unsatisfactory not to treat gifts and inheritance in the same way.

Ups and Downs in Taxes.

Taxes may rise or fall, depending on needs for public expenditure. There is some scope for improving their impact, but there is considerable tension between what people generally believe is a fair tax system and what economic theory and reason might suggest. It makes me doubt whether there is great scope for tax reform, or at least whether economists can have much influence on it. In any case, I do not believe that we have intellectual warrant for proposing highly simplified tax systems. Nor have we at all fully worked out what a good tax system would be.