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facilitate. New sources of oil and gas were an immediate and wanted, the politicians wanted and the market was well placed to development was something which the oil and gas companies in defi ning the costs and risks of development vis-à-vis the benefits. At the time, nobody questioned the benefi ts. It was just constraints and level of knowledge existing at the time.

People sometimes compare what happened then with offshore ‘green’ investments today. But they forget, there was no question then of using taxpayers’ money to subsidise the shareholders of ‘green’ investments today. But they forget, there was no question then of using taxpayers’ money to subsidise the shareholders of the private companies who, for reasons of profi t, were keen to exploit the natural resources of the UK. True, the fi scal and regulatory regime had to be fi t-for-purpose in order for the incentives to be adequate. But, at the end of the day, North Sea development was something which the oil and gas companies wanted, the politicians wanted and the market was well placed to facilitate. New sources of oil and gas were an immediate and uncontroversial benefi t, assuming they were affordable.

Can the same be said today about investments in so-called ‘green’ energy? It is much more questionable, because some of the investments (such as carbon capture and storage) only make commercial sense if politicians decide that there is a carbon problem to be solved and that the state should therefore subsidise grossly uneconomic projects, paid for by the imposition of a carbon price or taxes on carbon-intensive energy use.

‘Green’ investments in alternative fuels such as wind or solar might over time become attractive in themselves as new sources of energy. If, for example, the energy of the sun could one day be successfully harnessed, it would not only address the issue of climate change. It would solve most of the political problems associated with energy, from security of supply, to local pollution, to fuel poverty. In this case, economics and what is technically feasible advance hand-in-hand. But, at the moment, ‘green’ investments can only be made profi table if government taxes or prices carbon dioxide emissions.

So, what function are we asking economists to perform in the climate change debate? In certain circumstances, such as war, the rules of economics are suspended because consumer satisfaction and prosperity are no longer the point. National survival has become the sole concern. And that is how it seems to some commentators today in the context of climate change. Some even describe it as the peacetime equivalent of war, and yearn for the restoration of wartime restrictions and controls. Economists cannot tell us whether it is morally better to prepare for a climatic Armageddon (which may not happen) or enjoy all the immediate advantages offered by plentiful and cheap energy – not least for the developing world. But they can inform us of what economically is at stake. And they can also inform the debate about the most effi cient method of achieving reductions in CO₂ emissions if that is what politicians desire. For example, subsidisation of particular methods of power generation is likely to be much less effi cient than allowing the market to fi nd its own solutions.

The role of economists in the climate change debate is to help identify the ‘winners’ and ‘losers’ amongst policy options. And the problem with the current debate is that there is a tendency to ignore the danger that it is the weakest and poorest who stand to lose most if the laws of economics are suspended when addressing climate change.

Richard Ritchie, Director, UK Government Affairs, BP plc
The Effects of Labour Taxation on the Economy

By Patrick Minford

To pay for government spending, taxes are required. These taxes will cause people to alter their behaviour to a less efficient pattern unless we make the unrealistic assumption that they are poll taxes. A poll tax does not alter behaviour because it has to be paid regardless of what people do, but it falls foul of numerous obvious social and political objections.

Hence, the major way in which taxation is raised is via taxation of income or consumer spending. Since the biggest element in income is earnings from work, and since people work in order to consume, these two taxes both ultimately tax labour. In this article I will examine what effects labour taxation has. I shall not examine the effects of other sorts of taxation: the main other sorts are tax on non-labour income such as on income from savings, or on transactions such as house or share purchases.

We can divide the effects of labour taxation into two parts: static and dynamic. Static effects relate to the extent of the inefficiency produced in the pattern of people’s behaviour. Dynamic effects relate to the reduction of growth below the rate that would have prevailed if taxes had not choked off productivity-raising activities, such as entrepreneurship, training and education. Let us discuss them in turn.

**Static costs of labour taxation**

When a tax is levied on people’s decision to work (and to consume the resulting income), the incentive to substitute consumption for leisure is reduced and people decide to take more leisure. Hence, output is reduced and so is welfare because they would prefer to have worked and enjoyed the higher living standard.

We can measure the resulting reduction in welfare as the reduction of hours worked times the value they would have given the person in excess of the cost of leisure: this is known as the ‘economic surplus’ (sometimes the ‘consumer surplus’) lost by the change in behaviour.

On top of this we can add any substitution away from work in the taxing country to other activities, such as working abroad or working illegally. Here the loss is not to the person but rather to other countrymen in the form of tax revenue lost – whether to foreign governments or to illegality. If lost to foreign governments the loss is like a revenue lost – whether to foreign governments or to the person in excess of the cost of leisure.

Because of these substitution effects, not only does welfare fall when taxes rise, but total revenue can fail to rise to levels projected by the Treasury which typically assumes no or little substitution. In certain situations where potential for substitution is particularly high (as happens when high-earning people are subjected to unusually high marginal tax rates) revenue can even fall – the ‘Laffer Curve’ effect.

In this context, it is interesting to note the marginal rates of tax faced by people in Britain today. The table below shows the situation for a married individual with two children – the family situation does not affect the tax rate but it does affect the level of benefit withdrawal which also has an impact on work effort.

The headline rate of income tax is shown in the top line. As can be seen from the table, the maximum rate of income tax is 50% (having been at 40% for many years). However, individuals also have to pay National Insurance Contributions which act as a tax because the benefits – except in some cases which are being phased out – are not related to earnings. Furthermore, the personal tax allowance is phased out above £100,000, raising the effective marginal rate of tax further at this level of income. These elements comprise the basic picture as far as direct taxes are concerned. The withdrawal of welfare benefits also affects work incentives and it can be seen that this leads somebody on relatively low earnings to lose 70 pence in every extra pound they earn in taxes and forgone welfare benefits. Two elements are ignored here altogether but should be considered in a fuller picture. Indirect taxes on consumption can reduce an individual’s after-tax spending power by about 20% on average and employers are also charged National Insurance Contributions of about 11% (it can vary with circumstances) at all levels of income in 2009/10. Arguably, the burden of this is borne, in the long run, by the employee.

So, what we see in practice is considerable complexity in the tax system combined with high marginal rates across all income levels. This is to be expected given government spending of approximately 50% of national income.

### The Effects of Higher Taxation on Growth

In recent years economists have made quite a lot of progress in identifying how economic policies stimulate or retard growth: this is known as ‘endogenous growth’ as
opposed to growth that happens anyway (‘exogenous growth’). While there are obviously a whole raft of ways that policy contributes to growth – such as providing infrastructure, or maintaining law and order – a central idea of endogenous growth is that people choose activities that add to their own productivity by diverting time away from normal work into these. For example, somebody might acquire new skills to raise their productivity, or they may open a new business.

Growth results from these myriad personal decisions to devote time to activities that raise the productivity of existing factors of production. The more time is devoted, the more productivity and national income rises.

Taxation will act to reduce the amount of time devoted to these activities if their return drops because of it. Thus corporation taxes and other special business taxes all reduce productivity. For labour taxation to have this effect it must penalise the returns from this use of labour differentially from the normal use of labour in ordinary jobs. In other words, people who increase their productivity through education or otherwise must be taxed more highly. Of course in many countries the tax system does just this by levying increasingly higher marginal tax rates as income rises: since the whole point of devoting time to these activities is that our income will be higher, the higher marginal tax rate will discourage investment in skills, education and entrepreneurship.

Growth comes with a cost to the people producing it, in the form of current income forgone, and arguably is ‘created’ by optimising individual decisions. But when labour taxation’s marginal tax rates rise with income, growth will accordingly be reduced below this optimal rate. Measuring this loss is more difficult than measuring the static losses discussed above because much growth in productivity causes ‘spillovers’ to other industries which were not in the original calculations of the people raising productivity. Think, for example, of rising productivity in computers: much of the gains from better computers have accrued beyond the computing industry as other industries have been empowered to organise themselves better. These spillovers are a pure gain to the economy and widely spread. If we reduce growth, we reduce these spillovers.

Conclusions for policy
Not surprisingly, therefore, economists are most concerned about the effects of high marginal tax rates on growth. It is mainly for this reason that there is increasing interest in flat or at least flatter taxes. It is also why until recently ‘New Labour’ was committed to a maximum income tax rate of 40%. This interest has been reinforced by the static substitution effects and particularly their effect on total tax revenue. Little revenue is raised from sharply rising marginal income tax rates and they reduce economic efficiency and undermine growth. It has therefore seemed almost common sense to limit the extent of higher marginal income taxes pretty severely and rely on flatter income and consumption taxes to raise necessary revenue. However, politics as we have seen can easily trump such common sense in times of stress.

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Spending Your Way Out of Recession – How to Prolong the Agony

By Steven Kates

The belief that government spending can bring an economy out of recession seems reasonable. It is, however, untrue and, what is worse, it is very difficult to see why it is untrue. Even though this policy has failed time and again, it still seems to people that it is a policy that really ought to work, even when it never does.

It doesn’t work because an economy works through exchange. I produce something for you and you produce something for me. We don’t normally notice this because of the role of money: when I produce something for you, what I get is a sum of money and when you produce something for me, what you get is a sum of money.

The way that exchange works is through the flow of money payments. But beneath that movement of money from one person to another is a flow of goods and services in the reverse direction. It is the production of these goods and services that creates jobs.

Most government stimulus-type projects do not produce goods or services that other people would choose to buy with the incomes they receive. Even if they have an appearance of being productive, unless such projects generate more value than they cost – that is, unless the revenues they earn are greater than their costs of production – they cannot create wealth. All they do is pull resources out of productive sectors and continue the misdirection of resources that tends to characterise recessions.

So the economic experiment we are running is likely to once again demonstrate exactly what has been demonstrated each time it has been tried in the past. Higher levels of government spending do not create the conditions for sustained recovery. In the UK, government spending has risen while private spending has fallen by nearly 12%. Naïve Keynesians see government replacing missing private spending but the reality is that government spending crowds out private spending and productive economic activity.

Recovery must mean recovery of the private sector. For that to happen it requires the government to spend less so that businesses are able to spend more.

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