The NAPKIN that CHANGED THE WORLD

Supply-side economics tells us that increases in tax rates can reduce economic activity.

This, as **PHILIP BOOTH** explains, is the foundation of the well-known **'LAFFER CURVE'**

Introductory economics often includes the idea of 'supply-side' reforms and the 'Laffer curve'.

Interest in these ideas increased in the 1980s (much earlier in the US) because the emphasis on Keynesian income-expenditure models of the economy seemed not to explain the malaise of the 1970s.

Supply-side reforms are normally thought of as economic policies that increase the supply capacity of the economy – or, in the jargon of A-level economics, they move the aggregate supply curve to the right.

This might include welfare reforms that increase incentives to work, the liberalisation of regulations that reduces barriers to employment or changes to the tax system. This article focuses on the tax system.

The Laffer curve

Supply-side effects in the tax system are often illustrated using the Laffer curve.

The Laffer curve shows the relationship between tax rates and tax revenues. Underlying the curve is a trade-off that might occur between government spending, taxation and economic growth.

Some government spending can increase economic growth. At the very least, defence, law and order and a well-functioning legal system are necessary for a thriving business economy.

However, at some point the ability of the government to find spending projects that will enhance growth will be exhausted. Furthermore, the effect on growth of the taxes necessary to finance spending is likely to increase with the level of tax.

So, at quite moderate levels, increases in government spending and taxation will reduce economic growth.

Eventually, the impact of additional taxes on growth may be so large that the fall in growth caused by raising taxes further will actually lead to a drop in tax revenues.

In other words, attempts to raise taxes further will actually reduce tax revenue and consequently lead to a reduction in the resources available for government spending.

The higher marginal rates of tax will generate no net revenue because of the shrinkage of the tax base caused by the extra taxes. We call this point the top of the Laffer curve.

Indeed, this shrinkage of the tax base can be caused by a number of factors and not just by lower economic growth. Other factors can include higher levels of illegal tax evasion; higher levels of legal tax avoidance; and lower levels of inward investmen.

The original Laffer curve arose from a discussion between Art Laffer and US government officials Dick Cheney and Donald Rumsfeld. Laffer sketched the curve on a napkin as shown in Figure 1.

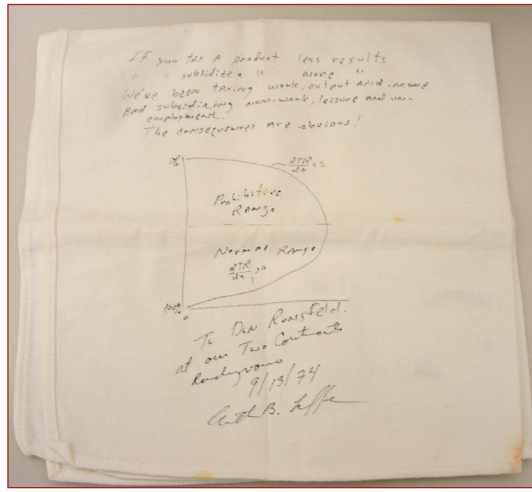
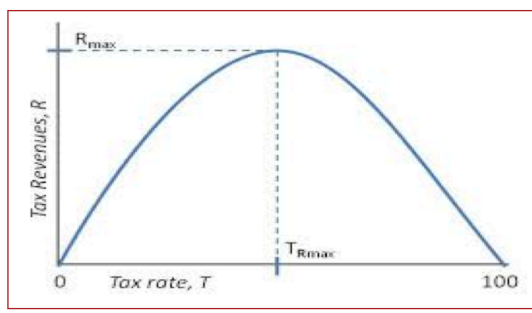


Figure 1 – The 'original' Laffer curve

An easier version to understand (with the tax rate on the horizontal axis and tax revenues on the vertical axis) is shown in Figure 2.

Figure 2



Estimating the top of the Laffer curve is complex and there is no clear consensus about where it lies. The Laffer curve is often used in discussions about what the average tax rate should be in the economy (that is the percentage of national income that is taken in taxation). However, it probably makes more sense to apply it to individual taxes.

The impact of different tax rises on revenues

In the UK, we have dozens of different taxes some of which are better designed than others and which are all charged at different rates. Whether an overall rise in taxation increases tax revenues will depend on which tax is raised.

For example, if VAT were increased slightly, it is highly likely that there would be an increase in revenue. It is a tax that is difficult to avoid and evade and it is spread across a broad base of taxpayers.

However, if the government were to try to raise the same amount of revenue by increasing inheritance tax or the top rate of income tax, it might fail to do so.

Firstly, such tax rates are already high. Secondly, the people affected are likely to change their behaviour (work less, invest less,

THERE ARE HISTORICAL EXAMPLES OF SIGNIFICANT INCREASES IN TAX REVENUES WHEN HIGH MARGINAL TAX RATES HAVE BEEN REDUCED

find avoidance mechanisms and so on).

In economic jargon, the people affected have a higher elasticity of supply – so their behavioural changes are more likely to undermine the government's efforts to raise more taxes.

In Figure 2, we can think of VAT (at current rates) as being a tax that is likely to be on the left-hand side of the Laffer curve, but the top rate of income tax and inheritance tax as being closer to the top of the Laffer curve (either on the right hand side or left hand side).

Indeed, when the UK government reduced the 50 per cent top income tax rate to 45 per cent in 2013-14, it conducted a serious analysis of the impact on tax revenue that might result from individuals changing their behaviour as a result of the change.

Their analysis suggested that, if there were no change to behaviour, the Treasury would lose around £3.5 billion as a result of reducing the top tax rate.

However, the Treasury found that this fall in revenue was more or less entirely cancelled because people would work more, there would be more investment in education and training and less tax avoidance and evasion.

In other words, we can say that the old 50 per cent tax rate[1] was more or less at the top of the Laffer curve – a reduction in the rate made no difference to revenue. Indeed, there are historical examples of significant increases in tax revenues when high marginal tax rates have been reduced.

Should governments aim for the top of the Laffer curve?

The 'top' of the Laffer curve is often described as the optimal level of taxation and government spending. It is not.

The top of the Laffer curve is the level of taxation that will maximise government spending. Any further attempt to increase tax rates beyond this level will be self-defeating – the government would be shooting itself in the foot because higher tax rates would lead to lower revenues.

The 'optimal' level of government spending and taxation is the point at which economic welfare is maximised. This cannot be accurately estimated, not least because it is impossible to calculate welfare at the national level.

However, there are certain things that the government might need to provide to ensure the right background for economic growth

Then, beyond this, there may be other things that we want the government to do (provide income transfers to the poorest, mental health services and so on) that might be insufficiently provided in the private sector and that will raise welfare further.

This takes us into an entirely different area of debate. However, the important point is

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that politicians might well try to maximise the tax take from the country, whereas welfare is likely to be maximised at a much lower level of taxation and government spending.

Even so, there might well be many individual taxes where reductions in rates actually yield increases in revenues•

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[1] It should be noted that a 50 per cent income taxpayer (now 45 per cent) paid a much higher rate of total tax. The 50 per cent just referred to income tax. There are then other taxes such as consumption taxes which lead the total tax at the margin on higher rate taxpayers to be much higher.