## Taxing the rich - can it raise any money for the government?

In 2010 the government will raise the rate of income tax on the UK's highest earners. James Browne of the Institute for Fiscal Studies explains why this may not have the Government's desired effect of increasing tax revenue.

After three decades in which such a reform would have been politically unthinkable, the government announced in the 2009 Budget that it would the increase income tax rate for people with incomes greater than $£ 150,000$ to $50 \%$ from April 2010, a change that will affect the richest $1 \%$ of adults. It hopes that this change will raise $£ 2.4$ billion a year to help reduce government borrowing requirements. An increase in the tax rate means that workers receive a lower proportion of each additional pound they earn and this reduces their incentives to earn as much income. In response therefore we would expect high income earners to reduce their taxable income. Very high income earners might be expected to be particularly responsive to changes in their tax rate as they have more opportunities to work overseas and have access to accountants to help them avoid paying tax. This would tend to reduce, and may even eliminate, the amount of revenue that taxes will raise. So, is the government likely to raise $£ 2.4$ billion with this tax increase?

## How responsive are the very rich to tax changes?

We can consider this question by looking at what happened the last time the tax rate for very rich people changed. In 1978 the marginal income tax rate (the proportion of each additional pound earned that is taken in income tax) was $83 \%$ for the very highest earners. Over the course of the 1980s, all income tax rates greater than $40 \%$ were abolished, significantly reducing the marginal income tax rate faced by the very rich. A lower tax rate would have strengthened the incentive for this group of individuals to increase their earnings. But the incentive to increase earnings doesn't just depend on income tax rates - other taxes on earnings such as National Insurance and consumption taxes are also important, since presumably what really matters to people is the quantity of goods and services they can purchase with their net (after tax) earnings. Even taking these into account, it is still true to say that the marginal effective tax rate (which includes all these other taxes) fell considerably for the very rich, making increasing income more worthwhile. As you'd expect, the result was an increase in the share of total income going to the richest $1 \%$ of adults, as seen in figure 1 .

Figure 1: The income share and marginal effective tax rate (METR) of the top 1\%, 19632003


Notes: Marginal tax rates on the left axis, income share on the right.
Sources: Income share from Atkinson (2007), marginal tax rates from Brewer, Saez and Shephard (forthcoming).

So, it seems as though very rich people are very responsive to changes in their marginal tax rate - when tax rates were increased during the 1970s, their income share went down, and then when taxes were cut during the 1980 s, their income share went up again. But you'll notice that the income share of the richest $1 \%$ has kept on increasing since 1988 even though the tax rate has remained constant. Obviously, other factors have been at work here, such as globalisation, and the liberalisation of financial services, which enabled high earners to earn more by selling their services to a wider group. One way of trying to isolate the effect of tax changes would be to compare how the income share of the top $1 \%$ changes with how the income share of the next $4 \%$ changed. Both groups were affected by the other changes in the labour market at this time, but only the top $1 \%$ saw a significant change in their marginal tax rate; the marginal effective tax rates of the next $4 \%$ did not fall nearly as much during this period (see figure 2 ). The different trends in terms of income share are therefore likely to be because of responses to changes in the tax rate.

Figure 2: The income share and marginal effective tax rate (METR) of the next 4\%, 1963 to 2003


Notes: Marginal tax rates on the left axis, income share on the right.
Sources: Income share from Atkinson (2007), marginal tax rates from Brewer, Saez and Shephard (forthcoming).

We see in figure 2 that the next richest $4 \%$ of the population also saw an increase in their income share during the period when taxes were cut for the very rich even though their tax rate didn't change very much. But the increase for the richest $1 \%$ was much larger, suggesting that this was because of the tax change, and hence that the richest $1 \%$ were very responsive to this. One way of summarising this 'responsiveness' is to use this information to create what is known as a taxable income elasticity. This is a similar concept to the price and income demand elasticities you're familiar with in that it measures how much taxable income changes when the net of tax rate (that's $100 \%$ minus the tax rate) changes by $1 \%$. Two IFS researchers together with Professor Emmanuel Saez of Berkley use this information about income shares and tax rates to estimate that the taxable income elasticity of the richest $1 \%$ of individuals during the 1980 s was 0.46 . This means that if the tax rate was initially $50 \%$ and it increased to $50.5 \%$ (so the net-of-tax rate fell by $1 \%$ from $50 \%$ to $49.5 \%$ ), the taxable income of the richest $1 \%$ would fall by $0.46 \%$. The taxable income elasticity tells us how taxable income will change when the tax rate changes and we can then work out how much tax revenue the government will collect. This enables us draw what is known as the Laffer curve, which shows how income tax and National Insurance revenues change as the marginal tax rate changes (see black line in figure3)

Figure 3: Laffer curve: change in income tax and National Insurance receipts as a result of changing marginal income tax rate applying over $£ 150,000$


Note: Assumes employee NI rate of 1.5\%, employer NI rate of $13.3 \%$ and consumption tax rate of $17 \%$.
Source: Brewer and Browne (2009).
So, assuming that the elasticity based on changes during the 1980s is right, we can see that the new $50 \%$ income tax rate could increase income tax revenues by about $£ 1$ billion compared to what is raised by the current $40 \%$ rate, considerably less than the government thinks. However, the government has said that they believe the correct elasticity is lower than this at 0.35 , meaning that they expect taxable income to fall by less when the marginal rate is increased. This is how the government reaches the conclusion that this measure will raise $£ 2.4$ billion, as we can see from the figure above. But note the title of the figure - we are only considering the effect on income tax and National Insurance revenues here. Are there any other tax takes that would be affected by the very rich reducing their taxable income?

## Lower taxable income could lead to lower consumption

It is reasonable to assume that if people are reducing their income in response to a tax change, they would also reduce their expenditure, and this would affect the amount raised by consumption taxes such as VAT. If we assume that individuals reduce their expenditure by as much as their income, we see that the government stands to raise a lot less revenue (see figure 4).

Figure 4: Laffer curve: change in income tax, National Insurance and consumption tax receipts as a result of changing marginal income tax rate applying over $£ 150,000$


Note: Assumes employee NI rate of $1.5 \%$, employer NI rate of $13.3 \%$ and consumption tax rate of $17 \%$.
Source: Brewer and Browne (2009).
If the richest $1 \%$ are as responsive to tax changes as they were in the 1980 s, and they reduce their expenditure by as much as their taxable income, the current $40 \%$ rate is already generating the maximum government revenue; any change in the rate reduces government revenue. Even if the government is right about the taxable income elasticity, if the very rich reduce their expenditure by as much as their taxable income, the government will raise about $£ 0.9$ billion; $£ 1.5$ billion less than they expect from this measure. But how likely is it that all responses from the very rich to changes in their tax rate will be genuine reductions in income and therefore to lead to reductions in consumption?

## Tax loopholes

The very rich clearly have a large incentive to arrange their affairs in a way that minimises the amount of tax they have to pay. The new $50 \%$ tax rate makes this even more worthwhile. Therefore, the very rich may respond to an increase in tax by rearranging rather than reducing their income. For example, contributions to private pensions are not taxed at present in the UK, although pension income in retirement is. Therefore, one way for the very rich to avoid paying the $50 \%$ tax rate is to increase pension contributions, as, so long as their income will be less than $£ 150,000$ when they retire, they will be taxed on this income at the lower $40 \%$ rate in the future rather than the $50 \%$ rate now. Other simple ways of avoiding income tax are to convert income to capital gains, which are taxed at a much lower rate of $18 \%$, and transferring income between spouses. As these actions do not represent a genuine change in behaviour, we should not expect them to lead to a change in total expenditure, at least in the long run. Therefore, the true picture is likely to lie somewhere in between what is presented in figures 3 and 4 .

Nevertheless, taxing the rich as a source of raising additional revenue does not seem to be a very promising avenue. The $£ 2.4$ billion the government expects to raise from the $50 \%$ rate is very small compared to the $£ 496$ billion the government expects to raise in total this year. Even if this is correct, then figure 3 shows that there is little scope for more revenue to be raised by
increasing this rate. But by restricting the ability of very rich people to avoid paying more tax by using the tax loopholes mentioned above, the government can raise more from the $50 \%$ tax rate. This is because, when people are forced to make a choice between earning money and paying more tax and not earning it at all, they are likely to accept paying more in tax rather than foregoing that income completely. Perhaps because of this, at the same time that the new $50 \%$ tax rate was announced, the government announced various changes to the taxation of private pensions designed to reduce the ability of the very rich to avoid paying the $50 \%$ rate by increasing pension contributions. These are likely to significantly increase the amount of revenue raised by the $50 \%$ tax rate.

