

In recent times you will have heard various politicians arguing that in order to improve the U.K.'s economy steps must be taken to increase the gross domestic product (GDP); GDP essentially being the value of goods and services provided within an economy during a one-year period. In the financial year 2022/2023 Gross Domestic Product was 2,506 billion; according to the House of Commons library key economic data report document at:<https://commonslibrary.parliament.uk/research-briefings/sn02783/>

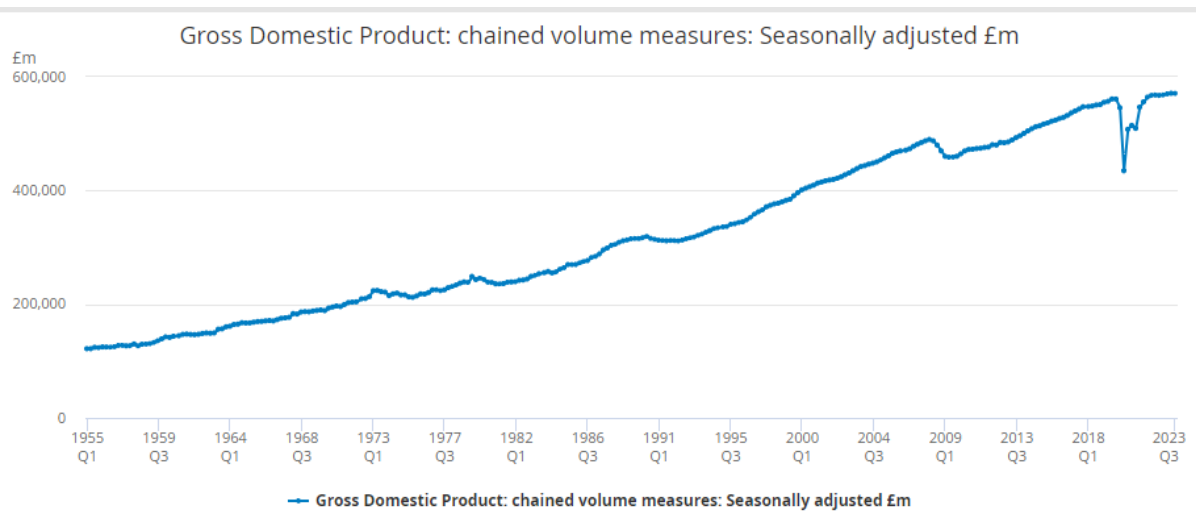
The other argument that is often raised by various UK politicians is that GDP can be increased by cutting taxes.

This article examines the evidence as to whether or not tax cuts do lead to increases in GDP. It also considers whether the exact opposite, i.e. tax rises, is an option that should be looked at.

The first point to consider is that GDP does not necessarily give an indicator of the prosperity and well-being of a country. For example, it might be that two countries have similar GDPs, but country A might have achieved the same level of GDP of country B whilst, say, its workers having to work twice as many hours. The extra hours is, by way of example, not something that a GDP figure can tell us anything about. Having said that though, this article considers not whether GDP is an accurate measure of prosperity but rather on whether cutting taxes does lead to an increase in GDP.

So, are tax cuts a means of encouraging growth in GDP? Before delving deeper into that question though there follows some GDP figures that give an insight into the types of levels of GDP achieved in the UK over past few years; specifically for 2019 to 2022. These details can be located at the Office for National Statistics website at <https://www.ons.gov.uk/economy/grossdomesticproductgdp/timeseries/abmi/pn2>

343	2019 Q4	560861	Total GDP 2019	2233921
344	2020 Q1	545597		
345	2020 Q2	434718		
346	2020 Q3	507643		
347	2020 Q4	514531	Total GDP 2020	2002489
348	2021 Q1	509261		
349	2021 Q2	546579		
350	2021 Q3	555956		
351	2021 Q4	564407	Total GDP 2021	2176203
352	2022 Q1	567372		
353	2022 Q2	567878		
354	2022 Q3	567392		
355	2022 Q4	568151	Total GDP 2022	2270793
356	2023 Q1	569973		
357	2023 Q2	571043	Total GDP for Apr 22 - March 23	2276559



The ONS figures above are in millions of pounds i.e. for say 2022 GDP was 2,270,793 million; (or alternatively described as 2,270 billion pounds or 2.27 trillion pounds.

So turning to the evidence concerning the impact of tax cuts on GDP.

In order to assess the impact of tax cuts on GDP this article, in line with various academic papers, focuses on one or two of the main tax raising categories such as income tax and corporation tax – in line with many academic papers on this subject.

In that regard the snippet of a table below (located at an overview table detailing tax revenue for the UK for a series of years starting from 2005 / 2006 at <https://ifs.org.uk/taxlab/taxlab-data-item/ifs-revenue-composition-spreadsheet>).

As can be seen the final outturn figures are yet to be finalised for 2022/23 and rather are described as forecasts. At the time of writing this article (Nov 23), the financial tax year is 2023/2024.

Current receipts by tax and gear											
<i>£billion (nominal)</i>	Outturn	Outturn	Outturn	Outturn	Outturn	Outturn	Forecast	Forecast	Forecast	Forecast	Forecast
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Income tax (gross of tax credits)	168.5	177.1	180.0	191.0	193.2	193.7	220.6	248.2	267.3	281.3	292.4
<i>of which:</i>											
<i>Pay as you earn</i>	145.7	149.8	154.3	161.9	164.8	166.7	188.3	211.6	227.9	235.8	243.7
<i>Self assessment</i>	24.3	29.3	28.3	31.5	21.2	31.2	37.0	42.0	44.5	50.9	54.5
National Insurance contributions (NICs)*	113.7	124.5	130.9	136.6	142.9	143.5	158.0	176.8	172.8	174.8	180.2
Value added tax (VAT)†	115.4	119.8	125.4	132.2	129.9	101.7	157.5	160.1	161.5	167.2	171.6
Corporation tax*	43.0	47.9	52.7	54.3	61.7	51.0	64.7	76.2	74.5	86.4	93.0
<i>of which:</i>											
<i>Onshore</i>	42.4	47.6	50.9	52.4	60.4	50.5	62.7	69.6	69.4	81.3	89.0
<i>Offshore</i>	0.6	0.3	1.8	1.9	1.3	0.5	1.9	6.6	5.1	5.1	3.9
Windfall tax on privatised utilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum revenue tax	-0.6	-0.7	-0.6	-0.7	-0.4	-0.3	-0.6	-0.4	-0.2	-0.2	-0.2
Supplementary petroleum duty	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum royalties	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gas levy (net of corporation tax clawback)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel duties	27.6	27.9	27.9	28.0	27.6	20.9	25.9	24.8	24.3	26.6	26.3
Capital gains tax	7.1	8.6	7.8	9.2	9.8	11.1	15.3	18.1	17.8	19.5	21.2
Inheritance tax / Capital transfer tax / Estate duty‡	4.7	4.8	5.2	5.4	5.1	5.4	6.1	7.0	7.2	7.2	7.4
Stamp duties	14.6	16.1	17.1	16.5	16.2	13.2	18.6	19.9	15.8	15.8	18.3
<i>of which:</i>											
<i>Property transaction taxes*</i>	11.3	12.4	13.6	12.9	12.5	9.5	14.2	16.0	11.6	11.4	13.8
<i>Stamp taxes on shares</i>	3.3	3.7	3.5	3.6	3.6	3.7	4.4	3.9	4.2	4.4	4.5
Tobacco duties	9.5	8.9	8.8	9.3	8.8	10.0	10.3	10.0	10.4	10.3	10.1
Spirits duties	3.1	3.4	3.4	3.8	3.8	4.1	4.4	4.1	4.4	4.8	5.1
Wine duties	4.0	4.2	4.3	4.4	4.3	4.7	4.7	4.5	4.7	5.0	5.2
Beer and cider duties	3.6	3.6	3.8	3.9	3.8	3.3	4.0	3.9	3.9	4.1	4.2
Car tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air passenger duty	3.1	3.2	3.4	3.6	3.6	0.6	1.0	3.2	3.8	4.4	4.6
Insurance premium tax	3.3	4.8	5.7	6.2	6.4	6.3	6.6	7.2	7.6	7.6	7.6
Climate change levy‡	1.8	1.9	1.9	1.9	2.0	1.7	1.9	2.1	1.9	1.9	1.9
Landfill tax*	0.9	0.9	0.8	0.7	0.6	0.6	0.7	0.7	0.6	0.6	0.6
Aggregates levy	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Betting and gaming duties	2.7	2.7	2.9	3.0	3.0	2.8	3.1	3.4	3.5	3.6	3.7
Customs duties and levies	3.1	3.4	3.4	3.4	3.3	3.0	4.8	5.6	5.3	5.1	5.2
Temporary bank payroll tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bank levy	3.4	3.0	2.8	2.6	2.5	2.3	1.5	1.3	1.3	1.3	1.3
Bank surcharge	0.0	1.1	1.8	1.9	2.0	1.4	2.4	2.4	1.2	0.9	0.9
Digital services tax	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.6	0.7	0.7
Diverted profits tax‡	0.0	0.1	0.2	0.0	0.0	0.1	0.2	0.0	-0.1	0.0	0.0
Apprenticeship levy	0.0	0.0	2.3	2.7	2.8	2.9	3.2	3.5	3.7	3.8	3.9
Soft drinks industry levy	0.0	0.0	0.0	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4
Plastic packaging tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.2
Residential property developer tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1
Energy profits levy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	5.7	5.3	4.2
Electricity generator levy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	2.7	2.1
Swiss capital tax	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total HMRC	532.7	567.6	592.1	620.4	633.7	584.7	716.2	787.6	803.9	841.7	872.3
Vehicle excise duties	5.7	5.8	6.2	6.5	7.0	6.9	7.1	7.4	8.0	8.0	8.3
Business rates	29.1	29.9	30.7	30.9	31.5	20.1	25.7	28.8	30.2	35.4	35.6
Council tax / Community charge / Domestic rates‡	28.7	30.1	31.5	33.5	35.4	36.4	39.0	41.3	43.6	45.9	48.3
Interest and dividends (excl. asset purchase facility)‡	6.1	6.4	7.1	24.0	26.5	23.5	24.1	32.5	40.5	38.6	35.2
Gross operating surplus‡	45.4	47.7	46.4	52.9	57.0	58.6	62.2	63.4	64.4	67.6	70.0
Other receipts and taxes	66.4	70.1	66.7	45.1	35.4	63.2	43.4	58.7	67.0	66.6	67.3
Current receipts	714.1	757.6	780.7	813.4	826.4	793.4	917.7	1019.7	1057.6	1103.7	1136.9

In 2022/2023 the forecast was for total UK HMRC receipts of £787.6 billion. This figure has various other HMRC revenues added to it in calculating total revenues, including vehicle excise duties, business rates, council tax, interest and dividends on government assets etc. giving a total predicted receipts forecast at £1019.7 billion for 2022/2023.

As mentioned above, at the date of this article (Nov 2023), the UK is currently in the financial year 2023/2024 and the forecast for this period has been set at £803.9 billion plus an additional amount to cater for excise duties, business rates etc. taking it to a total revenue of £1057.6 billion. Tax revenue of £803.9 billion is made up of various taxes from numerous sources including income tax, national insurance contributions, value-added tax, corporation tax, petroleum revenue tax, gas levy,

fuel duties, capital gains tax, inheritance tax, stamp duties (including stamp duty on share transfers and stamp duty land tax on property transactions) along with many other types of tax receipts.

The largest contributor to the HMRC tax revenue sum comes from income tax. Income tax is paid by individuals and so is different to, for example, corporation tax, which is a tax paid by companies.

Summary of Recent GDP and Tax Revenue and Total Revenue

So in summary the UK's **tax revenue for 2022/23 is set at approximately £786 billion** and, taking into account other revenue such as income on assets gives a **total revenue of £1019 billion**. Meanwhile **Gross Domestic Product for the same period** (ie April 22 – March 23 which equates to Quarters 3 and 4 for 2022 and Quarters 1 and 2 for 2023) **is approximately £2,276 billion**.

So, with this overview of Government Revenue, including tax revenue, and GDP in mind we now consider the question of whether or not tax cuts do indeed lead to increases in GDP. Where is the evidence for this?

Corporation Tax

Focusing firstly on corporate (corporation) tax Sebastian Gechert and Philipp Heimberger in their paper "Do corporate tax cuts boost economic growth?" see European Economic Review Vol 147 August 2022, 104157 <https://www.sciencedirect.com/science/article/pii/S0014292122000885> comment as follows:

" (1) The literature on corporate taxes and growth has been biased towards over-reporting results according to which corporate tax cuts boost growth rates. We have shown that it is about 2.7 to 3 times more likely to publish a result showing a statistically significant positive impact of corporate tax cuts on growth compared to a significant negative result.

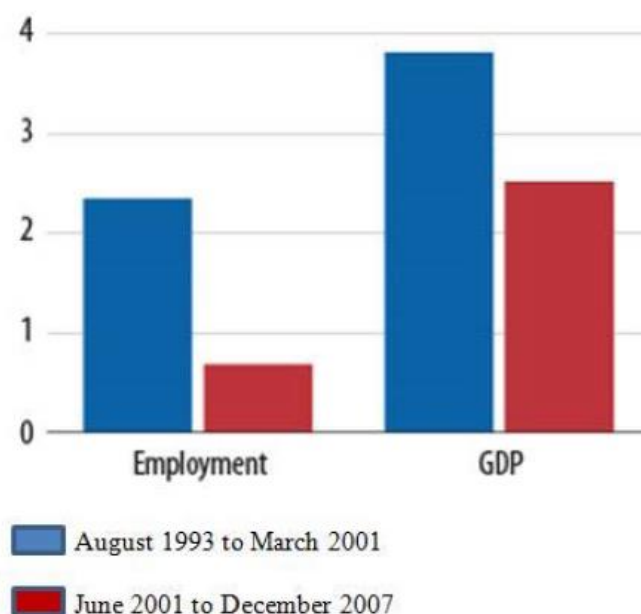
(2) After correcting for this bias and taking heterogeneity across studies into account, we cannot reject the hypothesis that corporate tax changes have, on average, no economically relevant or statistically significant effect on economic growth. This is confirmed after accounting for potential endogeneity issues between corporate taxes and growth. While this result invites caution concerning claims of substantial across-the-board growth effects as found in some prominent studies (e.g. OECD, 2010), there may be cases with positive or negative growth effects given the variance in the results. Our finding that the average effect of corporate tax cuts on growth is zero with some variance for individual cases is broadly consistent with the nuanced recent theoretical growth literature, which stresses that there are various (partly competing) channels – such as knock-on effects on R&D incentives or labour supply – through which corporate tax changes can affect growth both positively and negatively (Suzuki, 2022, Ferraro et al., 2020, Aghion et al., 2013, Aghion et al., 2016)."

Individual (Income) Tax

In regard to cutting individual taxes (such as, for example, income tax) see Effects of Income Tax Changes on Economic Growth William G. Gale Brookings Institution and Tax Policy Center Andrew A. Samwick Dartmouth College and NBER February, 2016 which considers individual tax cuts in the context of the US economy. In the abstract it states that: "The net impact on growth is uncertain, but many estimates suggest it is either small or negative."

A diagram taken from that paper (as shown directly below) shows that following tax rises in the USA in 1993 growth in GDP outstripped those that followed tax cuts in 2001.

Figure 4. Employment and GDP Growth Following the 1993 Tax Increases and the 2001 Tax Cuts



Source: Huang (2012)

Note: The vertical axis is the average annual growth rate during the time period

David Hope and Julian Limberg's 7 Jan 22 article (Socio-Economic Review, 2022, Vol. 20, No. 2, 539–559) (at url: <https://academic.oup.com/ser/article/20/2/539/6500315>) published by Oxford University Press and the Society for the Advancement of Socio-Economics says : "In sum, this study finds that major tax cuts for the rich push up income inequality, but do not boost economic performance. It therefore provides strong evidence against the influential political–economic idea that tax cuts for the rich 'trickle down' to benefit the wider economy. The study also points to a number potentially fruitful avenues for future research. **It remains puzzling why 'trickle down' ideas have been so powerful and persistent in tax policy-making in the advanced democracies despite the lack of macroeconomic benefits from cutting taxes on the rich.** Further research is also needed to more rigorously test the specific mechanisms driving our results. Lastly, future studies could investigate the extent to which the results generalize to developing and emerging economies, as well as nondemocratic regimes."

In summary there appears to be a number of research articles containing some practical evidence (such as the USA experience to indicate that the idea that tax cuts increase GDP is not necessarily correct.

The next question is a more subjective nuance one and that is whether persons (for the purposes of this article income tax will be the focus of this article) in the UK are able to sustain income tax rises in to facilitate increased tax revenue to assist with the provision of public services for Health, Education, Defence etc.

Of course it is difficult to assess whether person X with income Y can actually afford paying increased rates of income tax; that is without having full access to that person X's outgoings. It may be that

person X lives in a large home serviced by a large mortgage and so needs to spend much of their net income on keeping a roof over their head, it might be that person X needs all of their net income to pay for utilities and food and so on. In other words each individual will have their own specific set of financial circumstances and so, without specific details of each person's income, expenses, assets and liabilities it is impossible to determine if a specific person X can "afford" an increase in income tax. All that can be done is to consider average incomes, the income tax (and national insurance contributions) and to consider, say, net income that is available to different persons X in different tax brackets and how much less disposable income they might have if, say, income tax rates were to be raised by, say, 1% (or one penny in the pound)

This assessment will largely focus on income tax, rather than, say corporation tax, as income tax is the largest contributor to overall tax revenue in the UK. Before looking more closely at the impact of say a 1% increase in income tax revenue for those in different income brackets (£12,570 to £15,000, income in the band £15,000-£20,000, £20,000-£30,000, 30,000 and £50,000, £50,000 to £100,000, £100,000 to £200,000, £200,000 to £500,000, £500,000 to £1 million and £1million to £2 million and for £2 million plus.) it might be useful to have an overview of the UK's income tax rates as follows:

Currently in 2023/24 income tax rates in the UK are as follows.

- (1) Tax on earnings up to £12,570: 0%
- (2) Tax on base rate portion of income earnings from £12,571-£50,270 is 20%
- (3) Tax on earnings between £50,271 and £125,140 is taxed at 40%
- (4) Additional rate for income over 125,140 at 45%.

Note: For income over £100,000 the personal allowance of £12,570 is reduced by £1 for every £2 of income. So for someone with an income over £125,140 the personal allowance is reduced to £0.

(Details of these figures can be found on the government website at the following address:

<https://www.gov.uk/government/publications/rates-and-allowances-income-tax/income-tax-rates-and-allowances-current-and-past#tax-rates-and-bands>)

so, with the basics of how HMRC goes about calculating income tax payments in mind this article now considers what persons in various income brackets actually pay in tax (and National Insurance Contributions) followed by a review of the impact of, say, a 1% increase in income tax rates across the board in the UK i.e. 20% raised to 21%, 40% to 41% and 45% to 46%. To start please note the details in the table below which shows, amongst other things, total income tax liabilities for different ranges of total income; these figures can be found at the following website:

<https://www.gov.uk/government/statistics/income-tax-liabilities-by-income-range>

The following is a section of table 2.5 Income Tax liabilities by Income Range for 2023 to 2024:

Range of total income (lower limit)	Total number of Income Tax payers - in thousands	Total income - in millions	Total Income Tax liability - in millions	Average rate of Income Tax
£12,570	2,770	38,000	611	1.6%
£15,000	5,890	102,000	4,960	4.8%
£20,000	10,100	249,000	22,200	8.9%
£30,000	10,200	393,000	48,500	12.3%
£50,000	5,320	347,000	65,300	18.8%
£100,000	864	103,000	30,500	29.6%
£150,000	253	42,900	14,700	34.2%
£200,000	313	91,000	34,800	38.3%
£500,000	57	38,100	15,500	40.8%
£1,000,000	19	25,200	10,300	40.7%
£2,000,000+	9	45,300	18,000	39.7%
All Ranges	35,900	1,480,000	265,000	18%

The table below considers the following for each tax bracket:

- (1) **Tax bracket e.g. £12,750 to £15,000**
- (2) Total number of tax payers, for the income bracket of £12,750 to £15,000 this would be 2,770,000.
- (3) Total income tax receipts = for the income bracket of £12,750 to £15,000 this would be 38,000,000,000 i.e. 38 billion
- (4) Average income for each tax bracket. e.g. for the income bracket of £12,750 to £15,000 this would be 38 billion divided by 2,770,000 which is £13,718.
- (5) Tax paid on £13,718. In this case it would be 13,718 - £12,570 (personal tax allowance is deducted) = £1,148
 $£1,148 \times 20\% = £229$.
- (6) Tax payable if the income tax rate was increased by 1% : In this case it would be $£1,148 \times 21\% = £241$.
- (7) Difference between tax at current rate and increased rate which in this case would be $£241 - £229 = £12$.
- (8) Difference in tax receipt for each income bracket multiplied by the number of payers in that income bracket. In this case $£2,770,000 \times £12 = £33,461,600$
- (9) **Summary:** In this case if the total tax percentage was increased by 1% for those whose income in the range of £12,750 to £15,000, based on a calculation of the average (mean) figure for the income, that would result in an increase in the overall income tax receipts of **£33.46 million**.
- (10) Income net of tax on current figures $£13,718 - £229 = £13,489$. However, there would also be National Insurance of approximately £138 which would have to be deducted to give the final disposable net income of $£13,489 - £138$ equals £13,351
- (11) Income net of tax based on 1% increase in income tax rates. £13,477. Assuming National Insurance rates do not change then again there would be approximate £138 to deduct leaving a total of $£13,477 - £138$ equals £13,339. **Disposable income after income tax and NIC deduction = £256 per week.**

<p>(1) £15,000-£20,000</p> <p>(2) Total number of taxpayers in this bracket is 5,890,000</p> <p>(3) Total income received from all income earners in this bracket is 102 billion</p> <p>(4) Average income for those in this tax bracket ($102,000,000,000 \div 5,890,000$) = £17,317</p> <p>(5) Tax paid on £17,317 is as follows: first £12,570 = £0, £12,570 to £17,317 equals £4,747 and £4,747 multiplied by 20% equals £949.</p> <p>(6) Tax payable if income rate was increased by 1% would be $£4,747 \times 21\%$ which is £996</p> <p>(7) As such difference in income tax at 21% and 20% is $996 - £949 = £47$</p> <p>(8) Difference in tax receipt for increase in income tax of £47 per person (multiplied by number of payers in that bracket). In this case it would be 5,890,000 multiplied by £47 = 276,830,000</p>	<p>(9) Summary: in this case a total income tax percentage increase of 1% (or one penny in the pound) would lead to an increase in overall tax receipts of £0.276 billion</p> <p>(10) Income net of tax on current figures would be £17,317 less £949 = £16,368. However, there would also be approximately £570 national insurance contribution based on current rates to also be deducted leaving a total of $£16,368 - £570 = £15,798$</p> <p>(11) Income net of tax on figures based on 1% increase in income tax rates would be $£17,317 - £996 = £16,321$ (also having deducted approx' £570 for national insurance contributions this result in £15,751 per annum.</p> <p>Disposable income after income tax and NIC deduction = £302 per week.</p>
<p>(1) £20,000-£30,000 income bracket</p> <p>(2) Total number of taxpayers in this bracket 10,100,000</p> <p>(3) Total income received from all persons in this bracket is 249,000 million ie 249 billion</p> <p>(4) Average income for those in this tax bracket ($249,000,000,000 \div 10.1$ million) is £24,653.</p> <p>(5) Tax payable on £24,653 is as follows: first £12,570 equals £0 £12,570 to £24,653 equals £12,083 £12,083 multiplied by 20% equals £2,416</p> <p>(6) If tax rate was increased by 1% the amount of tax would rise to £2537</p> <p>(7) i.e. a difference of £121 between that and taxes at 20%</p> <p>(8) So the difference in tax receipt overall for a 1% increase in tax rate for all income earners in this bracket would be £121 multiplied by 10.1 million equals 1.2 billion</p>	<p>(9) So in summary the extra tax raised by increasing the tax rate by 1% (or one penny in the pound) is £1.2 billion.</p> <p>(10) The income, net of tax, based on current income tax rates would be approximately $£24,653 - £2,416 = £22,237$ per annum. Note that National Insurance contributions would be £1,450 (approximately) and as such the total disposable income for the year would be $22,237 - 1450 = £20,787$ per tax payer.</p> <p>(11) The income net of income tax should it be a 1% increase in tax would be $£24,653 - £2537 = £22,116$ (note assuming national insurance contribution rates do not change there would need to be a further £1450 approximately deducted from this figure to give £20,666). Disposable income after income tax and NIC deduction = £397 per week.</p>
<p>(1) £30,000-£50,000 = income tax bracket</p> <p>(2) Total number of taxpayers in this bracket is 10.2 million.</p>	<p>(9) In summary an increase of 1% in tax rate would for this income tax bracket resulted in an increase tax revenue for income tax of £2.65 billion.</p>

<p>(3) Total income for all tax payers in this bracket is £393 billion.</p> <p>(4) As such average income for those in this tax bracket would be £393,000,000,000 ÷ 10.2 million i.e. average of £38,529 per person.</p> <p>(5) Tax payable on £38,529 is as follows: first £12,570 equals £0 £12,570 to 38,529 = £25,959 tax at 20% equals £5,191</p> <p>(6) If tax rate was increased by 1% the amount of tax would rise to £5,451.</p> <p>(7) The difference in tax between 20% rate in 21% rate is £5451 -£5191 equals £260</p> <p>(8) If the tax rate was increased by 1% the amount of tax produced would rise to £260 multiplied by 10.2 million equals 2.65 billion</p>	<p>(10)The income net of tax based on the current income tax rates would be approximately £38,529 - £5191 which equals £33,338. (Note that National Insurance contributions would be approximately £3,115 and as such the income net of income tax and national insurance contributions would be £33,338 - £3115 = £30,223 per annum.</p> <p>(11)The income net of income tax should it be increased by 1% would be £38,529 minus £5451 which is £33,078 (note as above if National Insurance contributions remain the same there would be a further deduction of £3115 and a search total disposable income net of income tax and national insurance contributions would be £29,960)</p> <p>Disposable income after income tax and NIC deduction = £576 per week.</p>
<p>(1) £50,000-£100,000 income tax bracket.</p> <p>(2) Total number of Taxpayers in this bracket is 5,320,000</p> <p>(3) Total income of those in this tax bracket is £347 billion</p> <p>(4) As such average income for those in this tax bracket would be £347,000,000,000 ÷ 5,320,000 i.e. an average of £65,225</p> <p>(5) Tax payable on the £65,225 is as follows: £12,570 x 0% = 0 £37,700 (50,270 – 12,570) x 20% = £7540 £65,225 - £50,270 = 14,955 x 40% = £5982 Total tax = 13,522</p> <p>(6) If tax rate was increased by 1% then total tax liability would rise to £37,700 multiplied by 21% equals £7,917 £14,955 multiplied by 41% = £6,131 Total = £14,048</p> <p>(7) the difference in tax payable even a 1% increase in tax would be 14,048 - £13,522 = £526</p> <p>(8) If the tax rate was increased by 1% then the additional income tax raised for this income tax bracket would be 5,320,000 multiplied by £526 = 2.798 billion</p>	<p>(9) in summary the additional income tax raised by 1p in the pound (ie by 1%) would be sufficient to raise an additional £2.798 billion</p> <p>(10)An individual's take-home pay after income tax would be £65,225 -13,522 = £51,703. Note that assuming national insurance contributions remain the same there would be an additional national insurance contribution of approx. £4823 leaving a total disposable income of after national insurance and income tax deductions £51,703 - £4823 = £46,880</p> <p>(11)If there was to be an income tax increase of 1% then the take-home pay after income tax would be £65,225 less £14,048 equals 51,177 which after the deduction of national insurance contribution of £4823 would leave a disposable income of approximately £46,354 per annum.</p> <p>Disposable income after income tax and NIC deduction = £891 per week.</p>

<p>(1) £100,000-£150,000 income tax bracket</p> <p>(2) Total number of taxpayers in this bracket 864,000 people</p> <p>(3) Total income in this tax bracket is 103 billion</p> <p>(4) As such average income for those in this tax bracket would be $\text{£}103,000,000,000 \div 864,000 = \text{£}119,212$</p> <p>(5) Tax payable on £119,212 is as follows: Tax on first £2,964 = £0 ($\text{£}119,212/2 = \text{£}9606$, $\text{£}12,570 - \text{£}9606 = \text{£}2,964$) tax payable on £37,700 at 20% equals £7540 tax payable on next amount ($\text{£}119,212$ less $\text{£}2,964 + \text{£}37,700 = \text{£}78,548$) equals at a 40% rate £31,419 i.e. total tax of £38,959</p> <p>(6) If tax was increased by 1% then this would lead to an increase in tax of approximately £1,162 calculated as follows – No tax on first £2,964. £37,700 multiply by 21% = £7,917, £78,548 multiplied by 41% equals £32,204. Total £40,121</p> <p>(7) this means that an increase of 1% would result for each individual in an increase of tax of approximately £1,162 if the tax rate was increased by 1% then the additional income tax raised for this income tax bracket would be 864,000 multiplied by £1,162 which equals 1.004 billion</p>	<p>(9) In summary the additional income tax raised by increasing the rate by 1p in the pound (i.e. by 1%) would be sufficient to raise an additional £1.004 billion.</p> <p>(10) An individual's take-home pay after income tax for this bracket would be £119,212 - £38,959 which gives disposable income of £80,253 before national insurance contribution deductions of £5,902 which, after income tax and national insurance, leaves a total disposable income for the year of £74,351.</p> <p>(11) if there was to be an income tax increase of 1% then the take-home pay after income tax and national insurance of £40,121 and £5,902 would be £73,189.</p> <p>Disposable income after income tax and NIC deduction = £1407 per week.</p>
<p>(1) £150,000-£200,000 is the income tax bracket</p> <p>(2) The total number tax payers in this bracket is 253,000</p> <p>(3) The total income for this bracket is 42,900 million</p> <p>(4) As such the average income would be $42,900 \text{ million} \div 253,000$ which gives an average income of £169,565</p> <p>(5) Tax payable on this average income of £169,565 will be as follows: up to £37,700 at 20% will give £7,540 worth of tax the additional £87,440 taking it up to the next ceiling of 125,140 is taxed at 40% giving a total figure of approximately £34,976</p>	<p>(9) in summary an increase in the income tax rate of 1p in the £ would lead to an increase in tax revenue of £3.335 billion</p> <p>(10) An individual's average take home pay on current 23/24 tax rates would be £169,565 less income tax of approximately £62,507 = £107,058 Less NIC of £6,910 = £100,148</p> <p>(11) If there was to be an income tax increase of 1% then the take-home pay after income tax and national insurance of £63,825 and £6,910 would be £98,830.</p> <p>Disposable income after income tax and NIC deduction = £1900 per week.</p>

<p>beyond that the remaining £44,425 is taxed at 45% rate giving £19,991. Giving a total tax of £62,507.</p> <p>(6) If tax was increased by 1% then the tax on the average income of £169,565 would be £7,540 + £35850 + 20,435 giving a total tax of £63825</p> <p>(7) i.e. the 1% increase would lead to an additional tax amount of £1318</p> <p>(8) This would lead to an additional tax revenue for the Exchequer of £1,318 multiplied by 253,000 giving a total of £3.335 billion</p>	
<p>(1) £200,000 - £500,000 is the income tax bracket</p> <p>(2) The total number tax payers in this bracket is 313,000</p> <p>(3) The total income for this bracket is £91 billion</p> <p>(4) As such the average income would be £91 billion ÷ 313,000 which gives an average income of £290,734</p> <p>(5) Tax payable on this average income of £290,734 will be as follows: up to £37,700 at 20% will give £7540 worth of tax the additional £87,440 taking it up to the next ceiling of £125,140 is taxed at 40% giving a total figure of approximately £34,976 beyond that the remaining £165,594 is taxed at 45% rate giving £74,517. Giving a total tax of £117,033.</p> <p>(6) if tax was increased by 1% then the tax on the average income of £290,734 would be £7,540 + £35,850 + 76,173 giving a total tax of £119,563</p> <p>(7) i.e. the 1% increase would lead to an additional tax amount of £2,530</p> <p>(8) This would lead to an additional tax revenue for the Exchequer of £2,530 multiplied by 313,000 giving a total of £7.91 billion</p>	<p>(9) In summary an increase in the income tax rate of 1p in the £ would lead to an increase in tax revenue of £7.91 billion</p> <p>(10) An individual's average take home pay on current 23/24 tax rates would be 290,734 less income tax of approximately £117,033 = £173,701 Less NIC of £9333 = £164,368</p> <p>(11) If there was to be an income tax increase of 1% then the take-home pay after income tax and national insurance of £119,563 and £9,333 would be £161,838.</p> <p>Disposable income after income tax and NIC deduction = £3112 per week.</p>
<p>(1) £500,000 - £1,000,000 is the income tax bracket</p> <p>(2) The total number tax payers in this bracket is 57,000.</p> <p>(3) The total income for this bracket is 38.1 billion.</p> <p>(4) As such the average income would be 31.8 billion ÷ 57,000 which gives an average income of £668,421</p>	<p>(9) In summary an increase in the income tax rate of 1p in the £ would lead to an increase in tax revenue of £3.954 billion</p> <p>(10) An individual's average take home pay on current 23/24 tax rates would be £668,421 less income tax of approximately £286992 = £381,429 Less NIC of £16,887 = £364,542</p> <p>(11) If there was to be an income tax increase of 1% then the take-home pay after income tax</p>

<p>(5) Tax payable on this average income of £668,421 will be as follows: up to £37,700 at 20% will give £7540 worth of tax the additional £87440 taking it up to the next ceiling of 125,140 is taxed at 40% giving a total figure of approximately £34,976 beyond that the remaining £543,281 is taxed at 45% rate giving £244,476. Giving a total tax of £286,992</p> <p>(6) If tax was increased by 1% then the tax on the average income of £668,421 would be £7,540 + £35,850 + 249,909 giving a total tax of £293,299</p> <p>(7) i.e. the 1% increase would lead to an additional tax amount of tax taken of £6,307</p> <p>(8) this would lead to an additional tax revenue for the Exchequer of £6,307 multiplied by 57,000 giving a total of £3.954 billion</p>	<p>and national insurance of £293,299 and £16887 would be £358,235.</p> <p>Disposable income after income tax and NIC deduction = £6889 per week.</p>
<p>(1) £1,000,000 - £2,000,000 is the income tax bracket</p> <p>(2) The total number tax payers in this bracket is 19,000</p> <p>(3) The total income for this bracket is 25.2 billion</p> <p>(4) As such the average income would be 25.2 billion ÷ 19,000 which gives an average income of £1,326,315</p> <p>(5) Tax payable on this average income of £1,326,315 will be as follows: up to £37,700 at 20% will give £7540 worth of tax the additional £87,440 taking it up to the next ceiling of 125,140 is taxed at 40% giving a total figure of approximately £34,976 beyond that the remaining £1,201,175 is taxed at 45% rate giving £540,528. Giving a total tax of £583,044</p> <p>(6) if tax was increased by 1% then the tax on the average income of £1,326,315 would be 7,540 + £35850 + £552,540 giving a total tax of £595,940</p> <p>(7) i.e. the 1% increase would lead to an additional tax amount of tax taken of £12,896</p> <p>(8) this would lead to an additional tax revenue for the Exchequer of £12,896 multiplied by 19,000 giving a total of £2.5 billion</p>	<p>(9) In summary an increase in the income tax rate of 1p in the £ would lead to an increase in tax revenue of £2.45 billion</p> <p>(10) An individual's average take home pay on current 23/24 tax rates would be £1,326,315 less income tax of approximately £583,044 = £743,271 Less NIC of £30,045 = £713,226</p> <p>(11) If there was to be an income tax increase of 1% then the take-home pay after income tax and national insurance of £595,940 and £30,045 would be £700,330</p> <p>Disposable income after income tax and NIC deduction = £13,467 per week.</p>
<p>(1) £2,000,000 plus is the income tax bracket</p> <p>(2) The total number tax payers in this bracket is 9,000</p>	<p>(9) Summary: Increase of income tax rates of 1% would lead to additional tax for this bracket of income of £4.417 billion.</p>

<p>(3) The total income for this bracket is 45.3 billion</p> <p>(4) As such the average income would be 45.3 billion ÷ 9,000 which gives an average income of £5,033,333</p> <p>(5) Tax payable on this average income of £5,033,033 will be as follows: up to £37700 at 20% will give £7540 worth of tax the additional £87440 taking it up to the next ceiling of 125,140 is taxed at 40% giving a total figure of approximately £34,976 beyond that the remaining £4,908,193 is taxed at 45% rate giving £2,208,686. Giving a total tax of £2,251,202</p> <p>(6) If tax was increased by 1% then the tax on the average income of £5,033,333 would be 7,540 + £35850 + £2,257,768 giving a total tax of £2,300,284</p> <p>(7) i.e. the 1% increase would lead to an additional tax amount of tax taken of £49,082</p> <p>(8) this would lead to an additional tax revenue for the Exchequer of £49,082 multiplied by 9,000 giving a total of £4.417 billion</p>	<p>(10) An individual's average take home pay on current 23/24 tax rates would be £5,033,333 less income tax of approximately £2,251,202 = £2,782,131 Less NIC of £104,185 = £2,677,946</p> <p>(11) If there was to be an income tax increase of 1% then the take-home pay after income tax and national insurance of £2,300,284 and £104,185 would be £2,628,864.</p> <p>Disposable income after income tax and NIC deduction = £50,555 per week.</p>
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The additional amount of tax raised by a 1% increase in tax would be approximately as follows:

Income Range	Tax raised by 1% increase in tax billions unless otherwise shown
£12, 570 - £15,000	33.46 million
£15,000 - £20,000	0.276
£20,000 - £30,000	1.2
£30,000 - £50,000	2.65
£50,000 - £100,000	2.798
£100,000 - £150,000	1.004
£150,000 - £200,000	3.335
£200,000 - £500,000	7.91
£500,000 - £1,000,000	3.954
£1,000,000 - £2,000,000	2.45
£2,000,000 +	4.417
	£29.994 billion

Summary

Although various politicians like to equate lowering taxes with increasing GDP the evidence on this topic is not clear. Indeed there are many studies which indicate little or no effect and instead some practical evidence (USA economic data) showing a rise in GDP for a period from 1993 in which tax rates were increased and this rise being to a greater extent than the increase in GDP following tax cuts in 2001

It is generally acknowledged that public services are in severe difficulties, the most prominent example being found at <https://www.bma.org.uk/advice-and-support/nhs-delivery-and-workforce/pressures/nhs-backlog-data-analysis> which shows at Sep 23:

The latest figures for September 2023 show:

- A record high waiting list of 7.77 million, consisting of approximately 6.5 million individual patients waiting for treatment,
- nearly 3.29 million of these patients waiting over 18 weeks;
- around 391,000 of these patients waiting over a year for treatment – which is around 254 times as many as in September 2019, before the pandemic began.
- a median waiting time for treatment of 14.7 weeks – almost double the pre-COVID median wait of 8 weeks in September 2019.

In the final analysis you don't often get something for nothing.

So, in the face of these papers and statistics surely it is worth considering increasing taxes rather than seemingly accepting, unchallenged, the "emperor's clothes" argument that the only way to make people off is to cut taxes. Wouldn't it be better to spend £30 billion on Education or Health or other vital services.