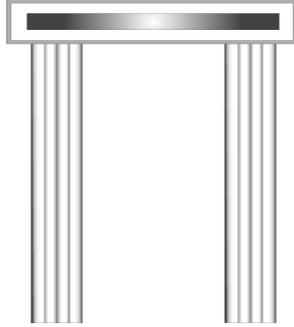


David B. Smith

**Britain's Taxable Capacity
Has it Reached the Upper Limit?**

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Britain's Taxable Capacity
Has it Reached the Upper Limit?

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Preface

This paper considers the upper limit to UK taxable capacity using long runs of historic annual figures up to 2019 and quarterly data up to 2020 Q3. The concept of taxable capacity is important because it defines the upper limit of sustainable government expenditure, after allowance is made for other receipts and a moderate level of borrowing. The analysis only deals with the economic arguments. It does not consider wider moral issues, such as how much is it right to tax people or how does the taxation required to fund 'Big Government' fit in with the greater good of society. The economic growth and social welfare maximising sizes of government are touched upon in passing. However, Britain's contemporary public spending burden is way beyond both points. Two conclusions are: 1) the upper limit of sustainable government expenditure in the officially preferred measure of national output is not quite 40 per cent, and 2) the previous and current Conservative governments' spending plans were beyond this limit – and, hence, unsustainable – even before the Covid-19 virus struck.

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I

Introduction

The idea that an upper limit exists to any nation's taxable capacity probably goes back to the dawn of settled civilisation – when ancient predatory despots could cause unintended population collapses through mass starvation or population flight. The concept of taxable capacity has been long established in public finance, with the Hapsburg and Bourbon monarchies of Spain and France in the seventeenth and eighteenth centuries notorious bad examples as a result of the national decline brought about by their 'Big Government' interventionism. However, a claim that there must logically be an upper limit to taxable capacity is not helpful without a rough and ready idea of where that limit is to be found.

The matter of a country's tax capacity is a practical, not theoretical, issue. Important practical questions normally require quantification, even if that can only be approximate. This note starts by clarifying the conceptual and definitional issues involved before examining the UK historic record to estimate roughly where the upper limit of taxable capacity might be. Knowing this point is important because, after allowing for a moderate budget deficit of, say, 3 per cent of Gross Domestic Product (GDP), and non-tax receipts from interest, dividends, rents etc. of another 3 per cent, taxable capacity defines the upper limit of sustainable government spending.

This question has always been important – particularly, in wartime – but is especially so now because of the hits to the economy and public finances caused by the Covid-19 lockdown. The official response to the epidemic has tended to treat it as a combination of a negative Keynesian demand shock and the financial crash of 2008. It is this belief that is used to justify the current lax fiscal stance and a very expansionary monetary policy.

However, the attempt to fight the virus using the policy tools appropriate to the inter-war Great Depression and the 2008 Global Financial Crash is misguided. This is because the current situation is closer to a great natural catastrophe, such as the 1923 Tokyo earthquake or the 1986 Chernobyl disaster. Such events hit aggregate supply disproportionately hard, particularly if they run on and on. It will not be clear for some time if the Covid-19 pandemic and the subsequent policy response has damaged aggregate supply by more, or less, than it has reduced total demand. While monetary policy can be reversed at short notice, provided central bank officials are sufficiently on the ball, this is not true of fiscal policy, especially where government spending is concerned. There is more administrative flexibility with respect to tax rates. However, there are few historic examples of governments rolling back expenditures once they have been conceded. This explains why the analysis that follows primarily deals with the question of fiscal sustainability. It is not concerned with the social welfare maximising size of government more generally.

Three Main Inflection Points

However, in previous work, I have often tried to distinguish between three main inflection points with respect to the share of government expenditure in national output (e.g., Smith (2006) or Booth (2016)).

- Firstly, there is the economic growth maximising point, which seems to lie between just under 20 per cent and 25 per cent of Gross Domestic Product (GDP). This sort of number can be observed in almost all of today's South East Asian 'tiger' economies

(including China) and Japan, France, Italy and Spain during their rapid growth in the 1950s and 1960s¹. Countries that choose this path not only grow more rapidly but also ultimately achieve geo-political supremacy over their more interventionist counterparts (Kennedy (1989)).

- Second, there is the welfare maximising point beyond which further increases in the government spending ratio yield no discernible increase in objective measures of wellbeing. This welfare maximising point might be as low as 30 per cent of GDP as conventionally defined and no higher than 35 per cent (see Tanzi and Schuknecht (2000) and Tanzi (2011)). This is comparable to today's Switzerland and Australia, the UK in the 1950s and early 1960s, and London, South Eastern and Eastern England before the Covid-19 outbreak – all of which might be considered reasonably prosperous and successful².
- Finally, there is the question of how far one can raise the tax and spending burdens before private activity collapses, tax receipts shrivel, and 'Big Government' interventionist policies of either the political left or right become unsustainable for economic and/or political reasons, including popular revolt. Because the UK is far beyond the first two inflexion points, this is the question that will be concentrated on from now onwards.

¹ It was 27½ per cent in Britain in 1936, when Keynes wrote his General Theory.

² The share of government spending in the twelve main UK regions was discussed in Smith (2006) and Booth (2016). The latter pointed out that there were huge differences in the government spending ratios between the various UK regions, with London and the South East being comparable to South Korea, but the North East, Wales and Northern Ireland all more socialised than any member country of the OECD. It was argued that the only solution to the endemic problems of the UK's more peripheral regions was the sort of big bang desocialisation practised by the more successful former Soviet satellites. This is the exact opposite of the Government's 'levelling up' agenda, which simply piles socialism on top of socialism.

II Two Matters of Fact

It is necessary to start with two simple truisms that are largely ignored in the popular debate on ‘tax and spend’ issues. *The first truism is that modern governments have almost no resources of their own.* The corollary is that, under normal circumstances, all government spending commitments imply higher taxes, either immediately, or in the future, when the increased debt resulting from responsible bond-market funding of the budget deficit needs to be serviced.

There is a dangerous third option to higher taxes or bond-market funding, however, which is borrowing from the banking sector (defined to include the central bank). But this is only non-inflationary during the transitory period that lending to the private sector is being crowded off the asset side of bank balance sheets, a process known as financial repression. Once most bank assets are government debt, any extra loans to the public sector boost bank liabilities – i.e., their deposits – and hence broad money. This is the ‘monetisation point’ at which inflation and, in extreme cases, hyperinflation commence their take-off. With the annual growth in UK M4ex broad money running at 11.6 per cent in September, this monetisation point may now have been passed.

The second truism, which follows on from the first, is that the tax base is not total GDP, as appears to be unquestionably believed by politicians and officials, but only the residual component of GDP after government-financed spending has been subtracted. This is because it is logically impossible for any institution (or individual) to generate real economic resources by taxing itself. Real resources invariably need to come from outside the boundaries of the bodies concerned. This is not to deny that Local Authorities, for example, pay VAT to central government. Rather, it is that these transactions can be netted out from an economic – as distinct from an accounting – perspective.

Measurement Problems

Unfortunately, there are problems of measurements, accounting and definition. Accounting and measurement issues may not be intrinsically exciting. However, they are often extremely important. Indeed, there used to be a saying in old-fashioned banking circles that it was the 1p discrepancy in the daily accounts that revealed the £1,000,000 fraud. A major problem with using GDP to measure the tax and government spending burdens is that GDP itself appears to be the proverbial piece of string. Several different measures are available in the official statistics and the chosen measure can make a difference of five or more percentage points to the alleged tax and government spending burdens (Smith (2006)). Furthermore, these competing indicators of national output can themselves be massively rewritten over time, as a result of major definitional changes as well as the usual bog-standard revisions. For example, the current European Standard Accounts (ESA-2010) measure of UK market-price GDP in 2013 is a huge £149bn (9.1 per cent) higher than the initial estimate published in 2014 using the previous ESA-95 conventions. This explains why it is not sensible to pass primary legislation mandating the expenditure of a fixed proportion of GDP on any given programme.

Table 1: Ratios of UK General Government Expenditure and Non-Oil Taxes to Money GDP in 2019-20 Using Different GDP Measures

	General Government Spending	Non-Oil Taxes
Gross Domestic Product (GDP) at Market Prices	39.1%	33.3%
Gross National Income (GNI) at Market Prices	39.9%	34.0%
GDP at Basic Prices	43.7%	37.2%
GDP at Factor Cost	44.2%	37.6%
GNI at Factor Cost	45.3%	38.5%

Source: UK Office for National Statistics and author's calculations

A specific difficulty with the officially preferred measure of GDP at market prices, as employed by the Office for Budget Responsibility (OBR), HM Treasury and the figures quoted until now, is that it is measured gross of indirect taxes and subsidies. This has several unfortunate consequences. One is that it overstates the real resources available. Another is that switching the tax burden from direct to indirect taxes (or simply raising VAT) increases reported national output, even if physical production has not changed by one iota.

A conceptually superior alternative is to use the factor cost measure of GDP, which nets out indirect taxes and subsidies. This is particularly the case for longer-term historic comparisons (Smith (2006)). There is also the rather similar basic-price measure – often called Gross Value Added (GVA) – used to measure regional GDP *inter alia*. Table 1 shows the effect of using alternative GDP measures on the calculations for government spending and the non-oil tax burden in the most recent financial year.

Any measure of GDP may overstate the resources available to fund government expenditure, however, for two main reasons. Firstly, the fact that the UK is an overseas debtor means that Gross National Income (GNI) at Market Prices was £45.9bn less than the equivalent GDP measure in fiscal 2019-20 because of the UK's large net payments of interest, profits and dividends overseas. Second, the term 'Gross' in the definition of GDP means that no allowance is made for the depreciation of the capital stock. This mattered less when the capital stock was mainly long-lived assets, such as railways or steel mills. However, the Office for National Statistics (ONS) now includes software development in 'capital formation', despite the notoriously short life of many such programmes (e.g., hedge fund trading software).

Any categorisation of a nation as 'living beyond its means' should surely include a situation where public and private consumption are only sustained by increasing borrowing from overseas and running down its fixed assets. This suggests that net national income at factor cost should be the preferred measure of national income, if the ONS could compile reliable depreciation figures, and that the tax base is the private sector component thereof.

III Government Spending and Tax – The long-term picture

Where are we now in terms of government spending and taxation? One important conclusion is that, historically, it has proved almost impossible for the government to keep the non-oil tax burden above 39 per cent of factor cost GDP for more than the odd year or so. This is for several reasons; these include public finance and ‘Laffer curve’ considerations and the fact that only the non-socialised sector can hand over real resources to the state. The analysis uses both long runs of annual data, which finish in 2019, and the most recent quarterly figures. The latter expire in 2020 Q3 in the case of both the general government accounts released by the ONS on 21st October and the official GDP figures published on 12th November. The GDP figures for 2020 will not be published until the first quarter of next year and reasonably firm figures will not be available for another ten months or so. This explains why we have used both annual and quarterly data for analytical purposes.

The results that follow suggest that, even before the Covid-19 crisis, the UK government spending to GDP ratio was high by historic standards, especially given the tight labour market and other signs that the economy was operating above capacity, such as the balance of payments deficit. Furthermore, the tax burden already appeared to be close to the upper limit of historic sustainability before the current pandemic. Chart 1 (below) shows the ratio of UK general government expenditure to the historically consistent factor cost measure of GDP from 1870 to 2019. The methodology and data sources were explained in Chapters 2 and 3 of Booth (2016) and Smith (2006) and will not be repeated here, while the significance of the 45 per cent line will be discussed later.

Chart 1: Ratio of UK General Government Expenditure to UK GDP at Factor Cost 1870 to 2019 (Annual Plots per cent)

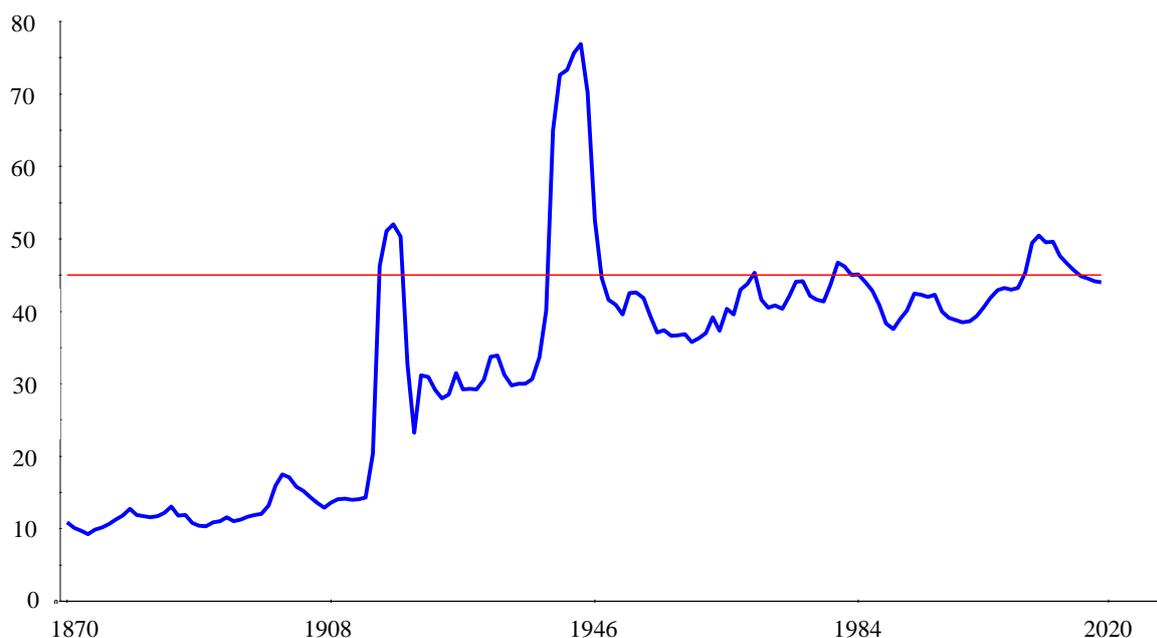
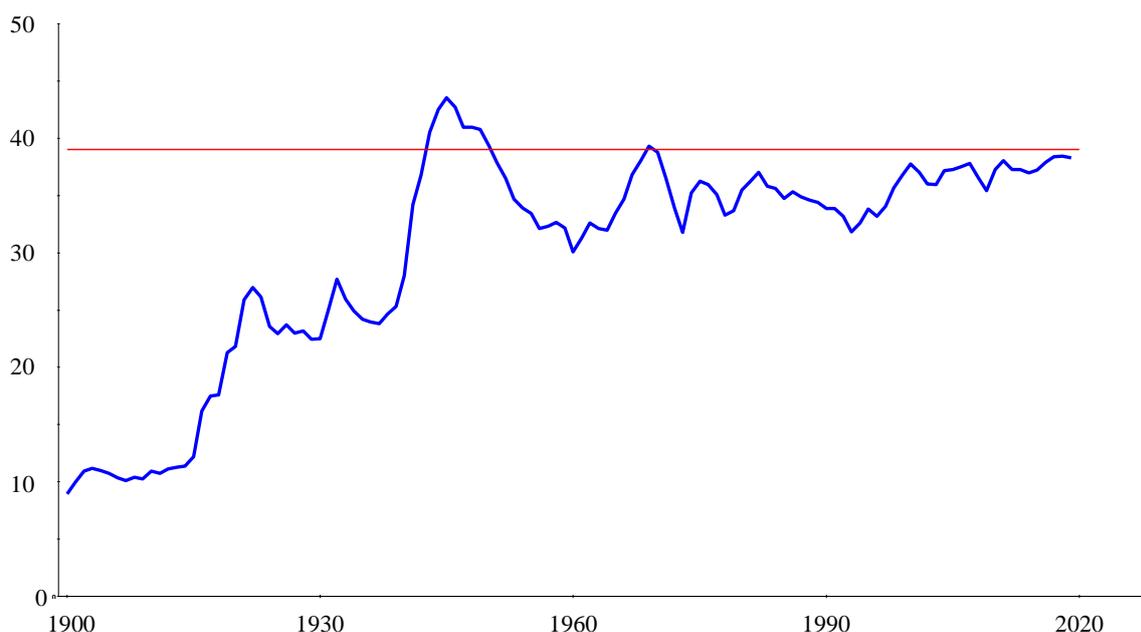


Chart 2 shows the equivalent calculation for the non-oil tax burden expressed as a share of non-oil GDP at factor cost. Oil revenues are trivial nowadays but were significant in the 1980s, for example, and tend to distort the historic record. Table 1 has already shown the differences that arise when alternative GDP measures are employed to measure the tax burden (updated versions of charts using other GDP measures that previously appeared in Booth (2016) are available on request).

One thing that should be apparent from Chart 2 is that it is difficult to get the non-oil tax burden to stay above 39 per cent of factor cost GDP for any length of time (horizontal line in red) despite massive changes to the structure of taxation and the various key rates of tax over this period. Even during World War II, when the UK economy was substantially Sovietised to maximise military production, the tax burden only averaged 37.5 per cent, albeit rising to average 42.2 per cent in the years 1943 to 1945, with a temporary peak of 43.5 per cent in 1945. The only other breach of the 39 per cent ceiling occurred in 1969, following the first International Monetary Fund (IMF) bailout of the UK economy.

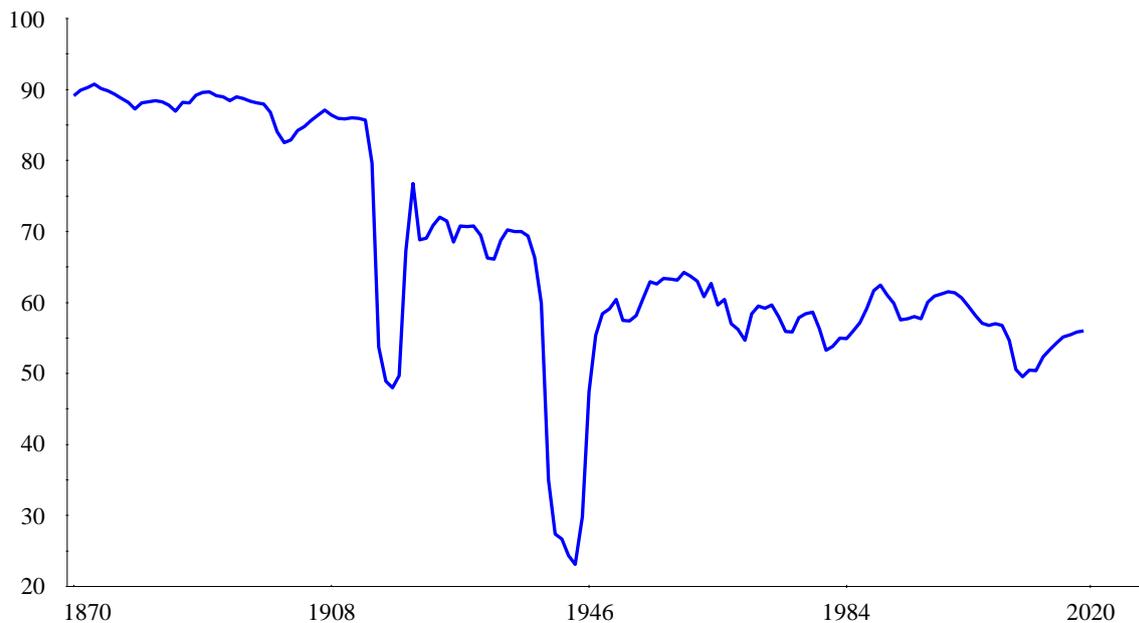
Chart 2: Ratio of UK Non-Oil Taxes to UK Non-Oil GDP at Factor Cost 1900 to 2019 (Annual Plots per cent)



Now, there are powerful Laffer curve and supply-side arguments to explain why some such barrier exists; particularly, in a small and open – but low-productivity – economy, such as Britain's, whose ability to compete internationally is likely to be undermined by any taxes that push up relative production costs. Supply-side theory states that the supply of tradeable goods and services shifts from high-tax to low-tax economies over time, hollowing out the productive base of the former. The consequence is either an overblown and low-productivity service sector, if the labour market clears, or mass unemployment if the replacement ratio of welfare benefit to potential income is generous.

However, one straightforward reason, in terms of the second truism above, is that a GDP-defined tax burden of 39 per cent actually represents a burden of almost 71 per cent on the residual private sector (Charts 3, 4 and 7) if the state is spending, say, 45 per cent of GDP. Such a burden on effort and enterprise will lead to a withdrawal in the supply of both – and the economy going ‘ex growth’ – unless private sector agents are either pure altruists or complete mugs.

Chart 3: Ratio of UK Private Sector Activity to UK GDP at Factor Cost 1870 to 2019
(Annual Plots per cent)



The severe tax squeeze imposed by the then Chancellor Roy Jenkins in 1969 – which represented the post-dated bill for the first Wilson administration’s reckless spending from 1964 onwards – appears to have reduced the sustainable growth rate of the UK economy from the 3 per cent to 3½ per cent range previously considered normal to some 1½ per cent in the 1970s. This supply withdrawal contributed significantly to the economic and political crises of the pre-Thatcher era that caused many international commentators to regard Britain as ungovernable. Some of Jenkins’ former colleagues also believed that his tax hikes cost Labour the 1970 election.

The concern now is that the recent UK growth trend of around 1½ per cent each year will collapse to zero, or remain negative, even after the Covid-19 crisis has burned itself out. This would have horrendous implications for social and political stability, as well as the public accounts and the wider economy. It is also worth noting how massive the likely public sector deficit in 2020-21 is in terms of the yields from increasing the main rates of tax, as calculated by Her Majesty’s Revenue and Customs (HMRC – see: Table 2 below)³.

³ The HMRC calculations provide similar figures for a wide range of other but smaller imposts. The major revenue raisers summarised in Table 2 account for just over 70 per cent of all tax receipts.

Table 2: Direct Effects of Some Illustrative Tax Changes

	<i>Receipts in 2019/20</i>		<i>Effects of Changes to Rates</i>		
	Receipts (£'s billion)	Share of Total Tax Receipts	2021-22 (£'s million)	2022-23 (£'s million)	2023-24 (£'s million)
Change basic rate income tax by 1p	194.3	26.3%	4,700	5,850	5,800
Change all main income tax allowances, starting and basic rate limits by 1 per cent	n/a	n/a	1,050	1,400	1,350
Increase Corporation Tax by 1p	61.2	8.3%	2,400	3,100	3,400
Change class 1 employee main rate by 1p	65.2	8.1%	4,500	4,600	4,700
Change class 1 employer rate by 1p	77.8	10.5%	6,600	6,800	7,000
Change standard rate VAT by 1p	130.1	17.6%	6,850	7,050	7,300

Source: HM Revenue & Customs, *Direct Effects of Illustrative Tax Changes*, 1st May 2020

However, the HMRC calculations are purely static ones that do not allow for the adverse second-round effects that rapidly come to outweigh the initial ones when simulated on properly specified macroeconomic forecasting models. At this point it is worth quoting from the conclusion reached by the Warwick Macroeconomic Modelling Bureau, who ran simulations on all the leading forecasting models of the time (Church et. al (1993) page 87):

'In order to analyse the impact of the various fiscal policy instruments it is essential to consider both direct and indirect effects. For example, the direct effects of tax changes on government finances can be quantified through an assessment of the size of the tax base to which the tax change is to be applied, and such calculations may measure the short-run impact on government spending quite well. However, over a period beyond the first few months following the tax change, the indirect effects through the operation of the economy as a whole come to dominate. Simulations of models of the macro-economy are the only method of quantifying the size and time profile of these effects.'

This quotation essentially makes the case for employing dynamic rather than static scoring when calculating the fiscal gains from tax increases. To ignore the second-round and subsequent effects operating at the level of the whole economy leaves out the most important influences at work and is equivalent to assuming that the government is in the same position as a monopolist facing a totally inelastic vertical demand curve. This is only taught as an extreme textbook special case in basic microeconomics and implies setting your price/tax rate to infinity. It is never considered to be a realistic possibility.

IV Weaknesses in the OBR Approach

Unfortunately, the Office for Budget Responsibility (OBR) macroeconomic model of the economy (and the HM Treasury one before that) sets the medium-term growth of the economy by external assumption (i.e., exogenously), rather than within the forecasting framework itself (endogenously). This means that a 100 per cent rate of income tax, for example, has the same output consequences as a 10 per cent rate, unless the OBR forecasters intervene to impose judgement on the forecasts. The underlying weakness of the OBR's forecasting framework is that it is essentially a detailed spreadsheet approach, in which the balance sheets add up, but not a properly specified economic one, in which behaviour changes in the light of the post-tax incentives to work, invest and take on entrepreneurial risks.

The technical inability to properly simulate the effects of tax changes explains why the OBR may be institutionally over-optimistic about the returns from raising rates of tax with respect to both the wider economic consequences and the revenue gains therefrom. One could make a similar caveat about some of the Institute for Fiscal Studies (IFS) tax proposals. These are authoritative on the microeconomics of the tax system but also cannot fully allow for second and further round macroeconomic effects for similar technical reasons.

The OBR suggested on page 121 of its 14th July *Fiscal Stability Report* that a fiscal adjustment of some £64bn might be required to stabilise the public finances in the long run. Table 3 illustrates the consequences for the three largest taxes of trying to raise an extra £60bn in tax overall. The working assumption is that the intention *ex ante* is to raise £20bn from each individual tax. The table then presents the rate hikes required if there was significant slippage in the tax base and/or adverse feedbacks on the expenditure side caused by the second-round, whole economy, effects. The HMRC ready reckoner numbers for 2023-24 (table 2) have been utilised because they show the largest take from a 1p tax hike. The rate hikes required with smaller taxes would be even more marked.

Table 3: Illustration of Tax Increases Required to Cut Public Borrowing by £20bn in Each Case from Raising Each of the Three Main Rates of Tax, Depending on Assumed Slippage of Tax Base and Other Adverse Feedbacks

<i>Assumed Slippage of...</i>	<i>Zero</i>	<i>25%</i>	<i>50%</i>	<i>66.7%</i>
Basic Rate Income Tax	3.5p	4.6p	6.9p	10.4p
Class 1 Employer NIC's	2.9p	3.8p	5.7p	8.6p
Value Added Tax	2.7p	3.7p	5.5p	8.2p

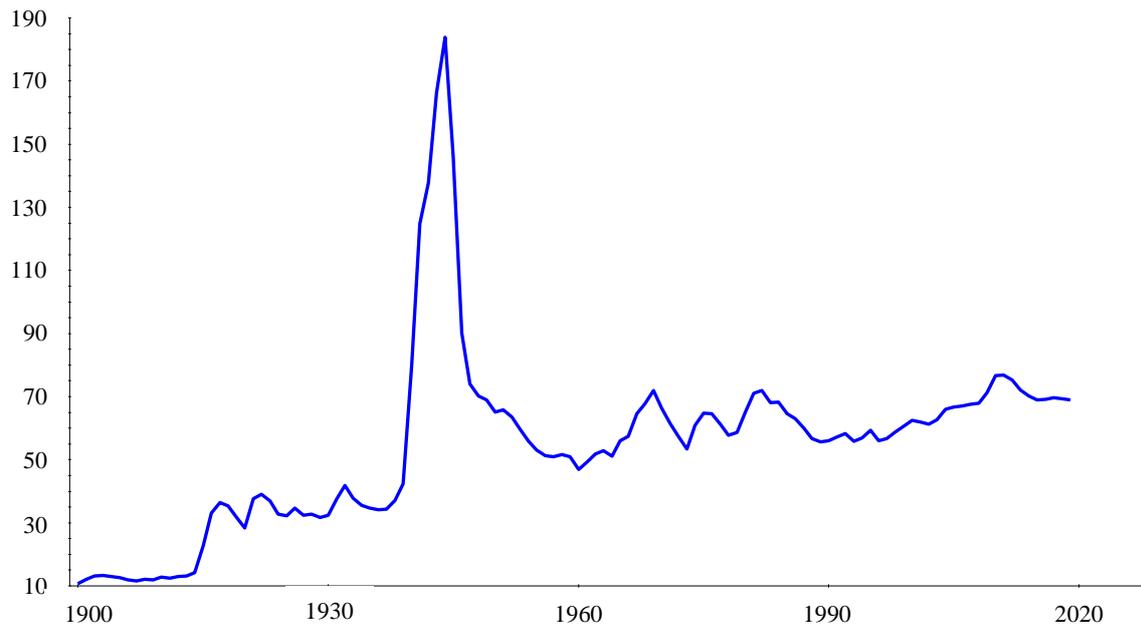
Source: HM Revenue & Customs, *Direct Effects of Illustrative Tax Changes*, 1st May 2020

The table shows the change in the rate of tax required in each case required to cut Public Sector Net Borrowing by £20bn. For example, with 50 per cent slippage, the basic rate of income tax would have to go up from 20p in the pound to 26.9p and with two-thirds slippage from 20p to 30.4p to reduce public borrowing by £20bn. This table is intended to be illustrative only.

The \$64,000 question is how big are the adverse feedbacks that arise from increasing individual rates of tax? Simulations carried out on the Beacon Economic Forecasting macroeconomic model suggest that, at best, only around one third to one half of any *ex ante* tax hike leads to

reduced government borrowing *ex post*. However, these are extremely rough and ready magnitudes which vary depending on the precise simulation being carried out. Allowing for these quasi-Laffer feedbacks suggests that there would need to be unfeasibly large rises in individual rates of tax to clear even a significant fraction of the present fiscal deficit⁴. Furthermore, private activity might collapse if such an attempt were to be made because of non-linearities in the feedbacks involved, the probable consequences for Keynesian 'animal spirits', and the likely induction of physical, human and financial capital flight.

**Chart 4: Ratio of UK Non-Oil Taxes to Residual Private Sector GDP 1900 to 2019
(Annual Plots per cent)**



In addition, the likelihood of full adverse Laffer curve effects – i.e., higher rates inducing lower receipts, increased welfare bills and heightened public borrowing – should theoretically rise exponentially as tax rates go up; this is why it is called a 'curve'. Putting it simply, a tax increase that reduces public borrowing when public spending is, say, 30 per cent of GDP could exacerbate the deficit if the starting point was 50 per cent or more.

The May 2020 HMRC ready reckoner calculations may also be over-optimistic about the potential tax base in a post-Covid-19 world. This is because so many businesses have been forced to either retrench, or close down entirely, in response to the various government-mandated lockdowns. This loss of productive potential and the associated loss of earlier employment opportunities now tends to be referred to as economic 'scarring'.

⁴ Comments by some Conservative MPs suggest that they are ridiculously overcomplacent about the scope to offset the recent Covid-19 related spending splurge with relatively small increases in future rates of tax.

V

Recent Quarterly Data

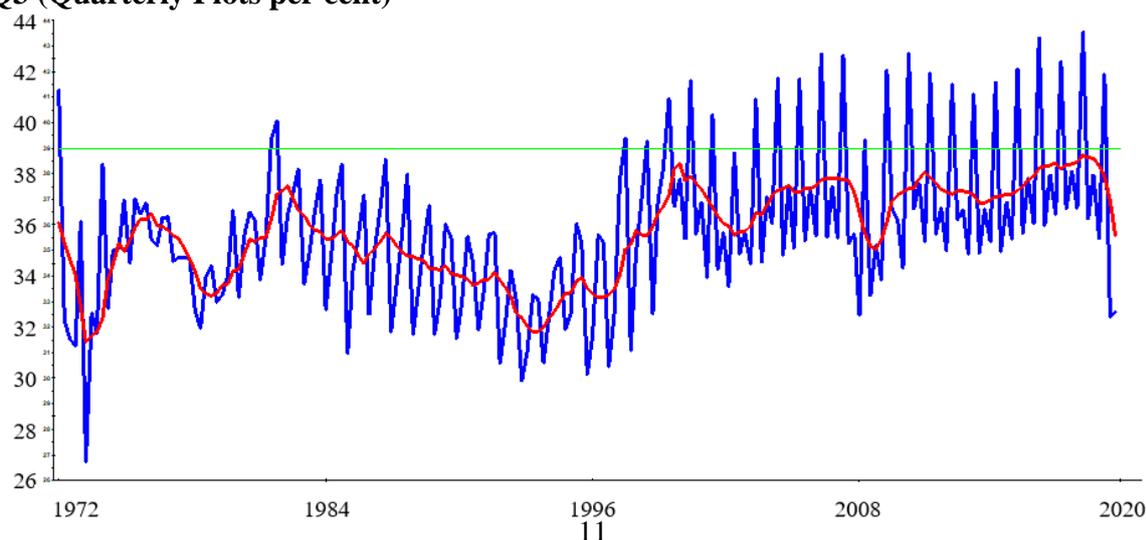
It is possible to redraw the earlier charts using quarterly data from the mid-1950s onwards. This brings out the more recent experience and may be more relevant from a political perspective. However, it has the drawback that the public spending and tax figures are not seasonally adjusted, even though they contain marked seasonal swings, which makes it difficult to distinguish the underlying signal from the seasonal noise. Because of the importance of the lockdown effect in the last two available quarters (2020 Q2 and Q3), Chart 5 shows both the actual quarterly figures (in blue) and four-quarter running totals divided by four (in red – the green line represents 45 per cent again). The chart reveals the huge spike in the government spending ratio associated with lockdown from 43.4 per cent in 2019 Q4 to 45.2 per cent in 2020 Q1 and 61.3 per cent in 2020 Q2 before easing to 53.6 per cent in 2020 Q3.

Chart 5: Ratio of UK General Government Expenditure to UK GDP at Factor Cost 1956 Q 2 to 2020 Q3 (Quarterly Plots per cent)



Chart 6 shows the equivalent quarterly plot to Chart 2. However, the chart has only been presented from 1972 Q1 onwards because of the massive seasonal swings in the tax to GDP ratio in the earlier period. The chart confirms that it is extremely hard to push the tax burden through the 39 per cent of factor cost GDP barrier which is again shown as a horizontal green line on the chart; the raw data are in blue and the trend in red. It also confirms how close the UK economy was to that historic limit before Covid-19 struck, with a ratio of 38.6 per cent being recorded in 2019. The fall in the tax ratio in the most recent quarter reflects the Government's attempt to stimulate the economy through cutting VAT etc. on some of the most hard-pressed sectors.

Chart 6: Ratio of UK Non-Oil Taxes to UK Non-Oil GDP at Factor Cost 1956 Q1 to 2020 Q3 (Quarterly Plots per cent)



VI Conclusion

This note has been primarily concerned with long-run fiscal sustainability; not the growth-maximising or socially-optimal shares of government spending in national output. The analysis began with two matters of fact: 1) that the government has almost no resources of its own, implying that all spending proposals ultimately require higher taxes, and 2) that government cannot tax itself. The latter implies that the tax base is not total national output but only the non-socialised component thereof. The unduly neglected – but important – measurement issues were then discussed. It was claimed that the officially preferred measure of GDP at market prices both overestimated the potential tax base and was inappropriate for historic analysis. Instead, factor cost GDP, which excludes the distorting effects of indirect taxes and subsidies, was chosen for the historic analysis. Net national income at factor cost would have been an even better conceptual measure, if data had been available.

The graphical analysis started by examining the share of general government expenditure in factor cost GDP using annual figures from 1870 to 2019 and the share of non-oil taxes in non-oil GDP from 1900 to 2019. An important finding was that it was almost impossible to get the non-oil tax burden to exceed 39 per cent of factor cost GDP for more than the odd year or so. It was also argued that the ‘static scoring’ of the effects of tax increases employed by the OBR and the IFS dangerously overstated the gains from raising tax rates. This is because their analysis does not properly incorporate the power and speed of the malign second-round and subsequent effects which operate at the level of the wider economy and soon swamp the initial effects.

The final section looked at the quarterly data from 1956 Q1 to 2020 Q3. This picked up the effects of the Covid-19 lockdown introduced in late March 2020 and revealed that the government spending ratio had gone through the roof in the second quarter before easing in 2020 Q3. Unfortunately, there are large seasonal movements in government spending and, even more, tax receipts. The ONS should be encouraged to revert to its earlier practice of publishing seasonally-adjusted figures for the key government expenditures and receipts.

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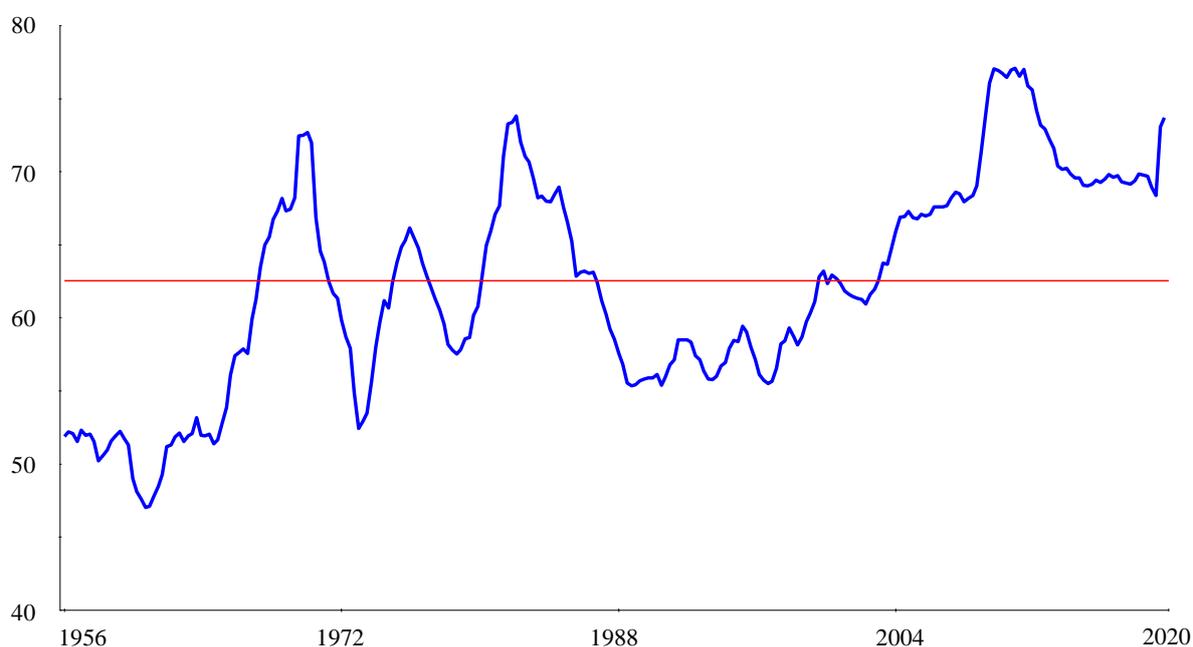
The main conclusion from the long-run historic analysis is that the upper bound of sustainable general government expenditure as a share of the factor cost measure of GDP is around 45 per cent, subject to all the measurement issues involved. This figure is derived by adding 3 per cent to allow for non-tax receipts, plus a further 3 per cent to allow for ‘acceptable’ government borrowing, to the 39 per cent top limit on tax revenues.

This 45 per cent figure is an upper limit, not a target, however. Indeed, spending ratios over 40 per cent have frequently been associated with stabilisation crises in the past, suggesting that prudent governments should keep spending below this 40 per cent to 45 per cent ‘danger zone’. Examples include: the 1949 sterling devaluation (spending ratio 41 per cent); the 1967 sterling devaluation (43 per cent); the 1969 International Monetary Fund (IMF) bailout (45.4 per cent); the 1976 IMF loan (44.2 per cent), and Britain’s humiliating ejection from the Exchange Rate

Mechanism in 1992 (42 per cent)⁵. It is correspondingly concerning that, even before Covid-19, the UK general government spending ratio had seemed stuck at 44 per cent to 45 per cent in recent years (i.e., 2016 to 2019), having earlier peaked at 50½ per cent in 2010.

The officially preferred market price measure of GDP does not possess a constant ratio to GDP at factor cost. So, translating from the factor cost measure to the official one is time contingent. However, in 2019-20, the spending upper limit would have been 39.8 per cent on the market price measure (actual 39.1 per cent), the 'natural' limit on tax receipts would have corresponded to some 34½ per cent (actual 33.3 per cent), and the danger zone to 35½ per cent to 40 per cent.

Chart 7: Ratio of UK Non-Oil Taxes to Residual Private Sector GDP 1956 Q1 to 2020 Q3 (Smoothed Quarterly Plots per cent - Horizontal Line Shows Mean of 62.6 per cent)



This indicates that the UK was nudging up against the historic upper limits of taxable capacity and sustainable government spending even before: the 12th December 2020 General Election⁶; the announcement of Mr Johnson's costly 'levelling up' agenda; the replacement of the relatively 'Thatcherite' Sajid Javid as Chancellor by the more emollient Rishi Sunak; and the 11th March 2020 Budget that stripped out any remaining fiscal slack. The UK's public finances were an accident waiting to happen well before the iceberg Covid-19 ripped the side off Britain's fiscal ship of state.

⁵ The inept conduct of British monetary policy and sheer bad luck, such as the outbreak of the Korean War, were also highly important influences, while each incident also had its own unique aspects.

⁶ In a pre-election Politeia blog *Good and Bad News: The Message from this Week's GDP Growth Figures*, published on 14th November 2019, the author finished as follows: "The stark conclusion is that a Conservative government would probably face a serious need for fiscal stabilisation within two or three years of taking office. For a Labour government with little market credibility, the time horizon could be a matter of months, weeks or even days. However, all good Marxists want to destroy the present system, not run it effectively, implying that this scenario might appear as an opportunity rather than as a threat. It is more surprising that the Conservatives have chosen to travel so far the same way and are wallowing in Big Government fiscal irresponsibility".

A longer perspective suggests that the UK public finances never really recovered from the explosion of government spending under Gordon Brown in advance of the 2010 general election. The 2008 financial crash had hit both the UK and international economies hard. The ostensible reason for abandoning fiscal prudence was Keynesian pump priming. However, there has always been a suspicion that the underlying political motivations were to both buy votes and leave such a fiscal mess behind that an incoming Conservative government led by what were regarded as 'effete toffs' would have a short life expectancy.

In the event, the Cameron administrations did sufficient to keep the show on the road but not enough to achieve long term fiscal sustainability, given all the looming demographic pressures associated with an ageing population. A specific criticism is that the Cameron administration's approach ignored the evidence from the vast and pre-existing fiscal stabilisation literature (Smith (2006)). As Chancellor, Mr Osborne merely attempted a timorous 'type 2' fiscal retrenchment that incorporated a sharp frontend-loaded increase in the tax burden, including raising VAT from 15 per cent to 20 per cent, while doing little to unwind Mr Brown's previous spending explosion. The results were entirely consistent with the claims of the fiscal stabilisation literature, including weaker than anticipated economic growth and only a sluggish improvement in the public finances. However, even the fig leaf of alleged fiscal prudence has been abandoned in recent years, as the OBR (2020) has pointed out:

'The pandemic has hit the public finances at the end of two years during which fiscal policy has already been eased materially. This started in June 2018, when Prime Minister Theresa May announced a large NHS spending settlement, and was accelerated in Chancellor Rishi Sunak's Spring Budget this year. In it, he set out plans to borrow significant sums on an ongoing basis and merely to stabilise, rather than reduce, the debt-to-GDP ratio.'

Clearly, Mr Johnson and his colleagues cannot be held responsible for the Covid-19 virus and many other countries have suffered in a similar way. Even so, it is hard to be positive about the nation's longer term fiscal and economic prospects given the current approach and the Conservatives' unwillingness to forewarn the populace about the longer term consequences of 'spend, spend, spend'. Possibly, the best one can do is emphasise that any attempt by the government to tax its way out would massively backfire economically, worsen the public finances, not improve them (see the evidence to this effect from the thousands of fiscal measures adopted by sixteen advanced economies since the late 1970s in Alesina et al. (2019)) and leave the Conservatives vulnerable to an anti-tax revolt sweeping through the electorate.

De-regulation and tax simplification are both receipt-friendly in the long term, have almost no upfront revenue costs and should be energetically pursued. Unfortunately, the gains may be only second-order ones compared to the returns from supply-side friendly tax cuts and reforms of high marginal rates. However, enhanced fiscal parsimony – accompanied by politically 'brave' rhetoric to explain the fiscal facts of life to voters – will be required if the UK is not to become a permanently stagnant, and low- or negative-growth economy and the international financial markets are to carry on underwriting the UK's twin fiscal and payments deficits. Otherwise, and at best, it may be back to the mid-1970s and the sterling and funding crises that triggered the December 1976 IMF loan (Roberts (2016)). At worst, given his Bourbon-like spending and interventionist proclivities, future historians may put into Boris Johnson's mouth the famous words attributed to France's Louis XV, that '*après moi le déluge*'.

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