# Taxation and economic recovery

COVID-19, and the enforced idleness and numerous other business restrictions it engendered, have resulted in a both enormous levels of government debt (due to measures such as paying company employees who would otherwise have been laid off) and severe economic recession.[1] In the UK, this specially incurred debt already amounts to more than 100 milliard (US billion) GBP;[2] for comparison, UK gross domestic product (GDP) in 2019 was about 2.2 billion (US trillion) GBP; it may fall by tens of percent in 2020. At a time when interest rates are close to zero or even negative—enabling the government to actually obtain an income from issuing bonds—this enormous special debt is less onerous than might at first appear. Nevertheless, it is felt that the special anti-COVID measures cannot be sustained indefinitely, and vigorous debate around the best way to get the economy back on track is now in progress. The main point of argument is whether to increase taxes—the usual way of bringing down government debt—or whether to stimulate economic growth by decreasing them.

It is taken as a given that the government has to have some income, to spend on, as a minimum, maintaining a stable framework (including law and order and basic infrastructure) so that citizens can go about their business. In reality it may encompass much more (Table 1). For now, let us assume that the spending is legitimate and has the assent of the majority of citizens. Interestingly, even those promoting maximum economic growth are not advocating a massive downscaling of government spending as a way to eliminate the debt.

Table 1. Total UK government spending (including local authorities) in 2019. Source: https://www.ukpublicspending.co.uk/total_spending_2019UKbn

| **Object** | **Amount/$10^9$ GBP** |
|---|---:|
| Pensions | 165 |
| Healthcare | 153 |
| Education | 89 |
| Defence | 50 |
| **Total** | **821** |

Not all of this spending is financed from taxation, but at least three-quarters is. Table 2 gives a breakdown of the principal tax revenues in the UK. There is a plethora of indirect taxes, of which fuel duty is the most significant, but also including duties on alcohol, tobacco, betting, air travel, landfill and so forth.[3] Indeed, it is said that the UK has one of the more complex tax

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1 E.g., P. Thomas, The length and severity of the coronavirus recession estimated from the dynamics of relaxing lockdown. *Nanotechnol. Perceptions* 16 (2020) 100–129.

2 See, e.g., D. Needham, Covid-19 and the UK national debt in historical context. History & Policy paper (22 April 2020).

3 T. Pope and T. Waters, A survey of the UK tax system (Briefing Note BN09). London: Institute for Fiscal Studies (2016).

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systems in the world. This is not such an easy thing to measure. One might start by comparing the number of pages needed to describe a country's tax code. Various organizations have developed indices.[4] There seems to be an inverse correlation between tax system complexity (regardless of the actual level of taxation) and a country's economic performance. Hence, it would be desirable to make taxation as simple as possible; even if the overall level is not decreased, the number of types of tax could be diminished.

Table 2. UK tax revenues in 2017/8. Source: H. Miller and B. Roantree, Tax revenues: where does the money come from and what are the next government's challenges? (Briefing Note BN198). London: Institute for Fiscal Studies (2017).

| **Type** | **Amount/$10^9$ GBP** |
|---|---:|
| Income tax | 173 |
| National insurance contributions | 131 |
| Value added tax (VAT) | 124 |
| Property taxes | 62 |
| Corporation taxes | 55 |
| Capital taxes | 35 |
| Fuel duty | 28 |
| **Total** | **690** |

Some taxation is in effect a kind of investment. Employee national insurance contributions fall into that category. In some countries, such as Switzerland, these revenues are invested and used to pay the employees' pensions when they retire. In most countries the revenues are actually used to directly pay already-retired employees' pensions, but the overall outcome is of course similar. As long as the need for the specific spending is accepted, this kind of tax can be excluded from the debate.

Some indirect taxes started with a similar objective; vehicle excise duty to pay for road construction and maintenance, and air passenger duty to pay for the provision of air terminal security services and the like. But it was never the intention of using alcohol duties to pay for the construction of new distilleries; such taxes combine the "cash cow" principle with the aim of discouraging a "necessary evil". In other words, the objects of such taxation are activities enjoyed by citizens but nevertheless with some socially negative outcomes, although not so severe as to warrant total prohibition. For example, the excessive consumption of alcohol can lead to public disorder and a burden on the healthcare system. The latter is of legitimate concern to the government if healthcare is publicly financed, as in the UK. A similar argument applies to tobacco and sugar duties.[5] Hence, the primary purpose of these taxes is to discourage purchase of the objects or activities to which they apply. Although I am personally acquainted with a man

[4] E.g., https://www.taxcomplexity.org/; https://taxfoundation.org/publications/international-tax-competitiveness-index/; T. Hoppe et al., Measuring tax complexity across countries. TRR 266 Accounting for Transparency (November 2019).

[5] The Soft Drinks Industry Levy ("sugar tax") was introduced in 2018.

who decided to stop smoking, immediately and permanently, when told the new price of cigarettes at his tobacconist the day after duties were increased, on the whole this policy of discouragement has been a deplorable failure (Figure 1).

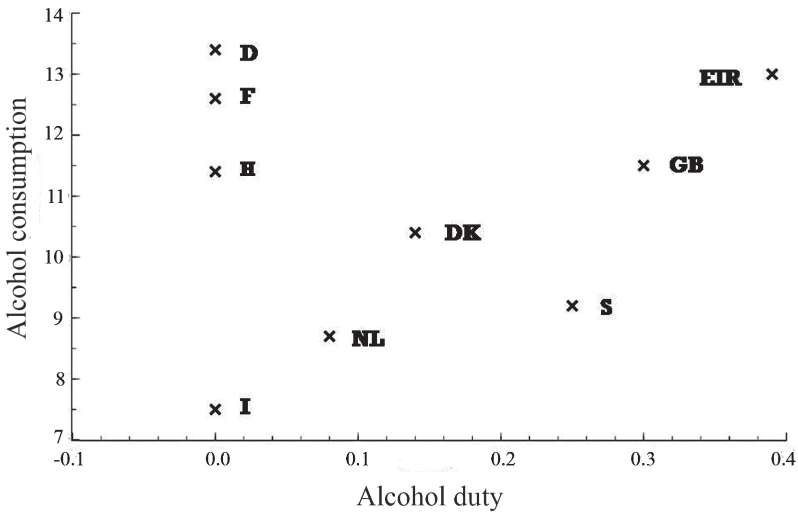


Figure 1. Alcohol consumption in litres of pure alcohol per annum per capita (aged 15 or over) [source: https://data.worldbank.org/indicator/SH.ALC.PCAP.LI] versus alcohol duty in GBP per UK unit (8 g of pure alcohol) for wine with a 12.5% alcohol content [source: C. Angus, J. Holmes and P.S. Meier, Comparing alcohol taxation throughout the European Union. *Addiction* 114 (2019) 1489–4094].

Once it was realized that demand for such goods and activities is more or less inelastic, governments were quick to start using it as a source of, potentially, unlimited revenues. At present, in the UK these miscellaneous indirect taxes now bring in rather more than half the revenues from VAT. Conveniently, the cash cow principle can be disguised as a moral tax to discourage vice. It is doubtless a matter of regret to many Treasury ministers that taxes on addictive drugs (heroin, cocaine, marijuana etc.) and prostitution would be considered by most citizens to verge on venality and such goods and activities remain either prohibited outright or strongly discouraged. There would of course be no point taxing an object for which demand was elastic, since revenue from it would quickly vanish. But some of these indirect taxes pose dilemmas, most notably fuel duty which, in the UK, accounts for about half of the retail price of petrol. In other words, it is already very high but such is the addictive nature of motoring that many years of successive increases do not seem to have caused traffic to diminish. During lockdown, unnecessary journeys were prohibited and the overall drop in traffic was remarkable, perhaps as much is 90%.[6] Fuel duty is an excellent cash cow and it is also virtuous to limit congestion, road accidents and pollution from exhausts. On the other hand, undoubtedly traffic is an indispensable adjunct of economic activity and, as such, should not be overly discouraged.

[6] Of course, this drop included the absence of people whose jobs had been suspended due to lockdown and who were therefore no longer driving to work (but some of them could anyway have walked or bicycled).

A similar argument applies to VAT. The government does not wish to generally discourage the purchase of goods and services,[7] although the more elastic the demand, the greater the discouragement.

Taxes of this nature, also business rates, council tax and other property taxes, can in principle be increased without limit, whereas taxes based on the revenue of the taxpayer, such as income tax and corporation tax, cannot be increased beyond 100%. This observation has relevance if a drastic simplification of the tax system were to be carried out and the entire revenue needed for government spending (excluding employee national insurance which is, in effect, directly returned to the taxpayer) raised from a single tax. The question is, then, simply which tax should it be?

This approach would, at a stroke, eliminate the endless arguments about encouraging or discouraging this or that activity by tweaking tax rates, which has resulted in the enormous and unwieldy complexity of the present tax system.

Revenue-based taxes are intrinsically unsuitable to become the sole tax because of their inherent maximum rate of 100%. VAT, which at a rate of 20% currently brings in almost 20% of total revenues, would presumably have to be increased to a rate of about 100% to become the sole tax. There is nothing intrinsically unworkable about this idea. The overall tax burden would remain the same so nothing would become unaffordable. One possible result would be an enormous increase of ingenuity to exploit zero-rated goods and waste, such as the creation of natural structural polymers derived from food and food waste to replace those derived from fossil fuels.

Although COVID-19 has presently, albeit presumably only temporarily, diverted resources, both material and of thought, away from problems of waste and climate change, these latter problems remain important medium- and long-term preoccupations. The use of [value-added] taxation to tax [virgin] resource consumption, instead of labour wages, has already been proposed.[8] If all reused, repaired, repurposed, remanufactured or recycled goods and materials were zero-rated, we would go a long way to drastically eliminating waste. This would be far more effective than, for example, landfill tax, which has been a dismal failure. Introduced in 1996 in the UK, ostensibly to discourage the practice since it was perceived that the country was running out of landfill capacity,[9] and also to reflect the environmental diseconomies of landfilling that were not being paid for by the owners of landfill sites, despite its presently very high level (around 500% of the market cost) it has not resulted in a proportionate reduction of the amount of waste being landfilled. Furthermore, it has encouraged the incineration of waste, which would otherwise be far too expensive to compete with landfilling, even without considering the diseconomies of the enormous quantities of $CO_2$

7 Humanely, certain items such as basic foodstuffs, books, children's clothes and motorbike helmets are zero-rated.

8 W.R. Stahel, Circular economy and intelligent decentralization; nanotechnologies and materials, metals and mining. *Nanotechnol. Perceptions* 16 (2020) 151–168.

9 Presumably it was considered that the market would not be able to solve the capacity problem—if capacity rapidly dwindled, enormously raising the market cost of landfilling, improperly disposed-of waste could become a public health hazard, hence turning the problem into one of government responsibility.

emitted (roughly 1 tonne per tonne of waste burnt), which now pose a serious problem for the UK's zero carbon ambitions.

The achieving of zero carbon would, of course, be a strong motivation to make fuel duty the sole tax. Presently contributing around 5% of total revenues, at a rate of about 100%, it would have to increase to a rate of about 2000%; i.e., about 12 GBP per litre of petrol. This would be far simpler, and could be a far more effective measure than the elaborate programme of banning internal combustion engines (first Diesel then Otto motors etc.) that has already been announced by the government. In this case, success would be measured by revenues from the tax dwindling away, hence a new tax would have to be found to replace it. Hydrogen would presumably be exempt.

The idea of this new approach to taxation is not to replace market forces, but to augment them by taking account of the diseconomies that market forces have perennially failed to address. Given the necessity for raising some revenue for government activities, it would be tragic waste of effort if taxation remained essentially arbitrary without a deep consideration of the collateral achievements it could attain by being wisely directed in its application.

The present colossal economic disruption presents a unique—in the modern era—opportunity for profoundly rethinking many aspects of our economy. It would, in fact, be more logical to first decide what government spending should be continued. This will set the level of revenue that should be raised from taxation, after which its most appropriate mode can be determined.

Looking further ahead, one should not rule out a fairly rapid evolution away from the more or less centralized nation state altogether. Its weaknesses and limitations have been sharply thrown into focus by COVID-19. The global Internet, and all that is associated with it, together with the small, isolated social units imposed by COVID-19 have made the necessity for nation state (let alone supranational) government less obvious. But that evolution must remain the topic for a later paper.

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