

Written evidence submitted by SAS Institute

1. SAS is the leading global partner to governments and private enterprises who want to make better decisions faster. SAS uses artificial intelligence and analytical software to enable fully informed, consistent decisions to be taken throughout organisations based on the sum of institutional knowledge. This can take the form of crucial insights and predictions that can be distilled from the data to make evidence the basis for board level policy decisions right down to automated split-second machine-decisions to perhaps honour a card-payment at point of sale, authorise a benefits claim or even agree a tax return online. Both ends of the scale utilise the same data and each informs the other accordingly.
 - SAS operates at the frontiers of technology such as computer vision, deep neural learning, natural language processing, entity resolution and computer vision and, as the world-leader in both Analytics and Artificial Intelligence Platforms, invests over \$1Billion per annum in research and development on behalf of its customers at nearly 90,000 sites worldwide. SAS is committed to ethical use of data and is recognised for its socially responsible, ethical, and moral business practices.
 - SAS has been a partner to Her Majesty's Government for 40 years and operates at the heart of HM Revenue and Customs CONNECT programme as well as across most main central government departments and supports NHS, police, and other agencies in devolved and local government.
 - SAS recently supported the rapid deployment of HMRC's implementation of the Chancellor's COVID-19 mitigation measures such as the Job Retention Scheme and is now engaged on work to measure and enforce compliance with the terms of the Eat Out to Help Out scheme.
 - SAS submits this evidence in good faith based upon our experience of working with revenue agencies across the globe and our expertise in delivering innovation through our technology to both private and public institutions. As such we declare an interest as both an existing supplier and a potential future supplier.

SUMMARY

2. COVID-19 has shown the ability of HM Government to execute change to taxes swiftly and effectively. It's occurrence only amplifies the urgency for reform of our existing approaches to tax. Business model changes will further accelerate and place greater pressure to drive effective tax yield to support public services delivery and debt paydown, whilst maintaining international competitiveness to attract inward investment. This, coupled with Brexit, means now is the time for swift and decisive reform. Our system is dated, too complex and unclear. Simplicity, equity, transparency and alignment need to be at the heart of reforms introduced. They need to be implemented effectively as all too often, well-intended policy, results in the lower than anticipated benefit levels due to failure in execution and administration.
3. In a post COVID, post Brexit world there will be significant risks and challenges in getting this right. But we need to be bold. Even before these events we were facing issues as a nation - low GDP per head, low business investment vs. many of our international counterparts,

austerity cuts impacting public service quality and building discontent in the wider electorate, increasing debt.

4. As the impact of the pandemic and potential impact of Brexit truly starts to be felt there will be an increased public focus on wealth. Effective tax rates of the wealthiest individuals are low, even if £GBP paid by them is high in absolute terms. Some equalisation of non-remuneration based income is one area, amongst others, that could be a focus. All this is a politically difficult balancing act and whatever we do, ensuring our international competitiveness must be at the centre.
5. The structuring of reforms will be as key as the reforms themselves. The sheer speed and unpredictability of global economic change today demands the ability to pivot in an ordered and proactive way, rather than in a reactive manner which will promote downstream complexity and recreate the disorder, mis-understanding and administrative complexity of the present system
6. Designing a future tax system in collaboration with those delivering it - and citizens using it - is a fundamental concept that must be embraced
7. There are some landmark political choices to be made which are not going to be easy, but if there was a time to address these major questions in this regard, it is now.

SAS RESPONSE TO INQUIRY

Q1. WHAT ARE THE MAJOR LONG-TERM PRESSURES ON THE TAX SYSTEM IN THE UK, INCLUDING THOSE ARISING FROM CHANGES IN WORKING PRACTICES, DEMOGRAPHICS, THE ENVIRONMENT AND OTHER FACTORS? HOW ARE THESE AFFECTING THE EFFICIENCY OF THE TAX BASE AND THE OVERALL LEVEL OF DEMAND FOR PUBLIC SERVICES?

8. We do not provide an exhaustive analysis but offer the following as context to subsequent responses to the questions posed by the inquiry.
9. There are many and diverse long-term pressures on the UK tax system ranging from globalisation effects, that offer opportunities to move value-adding corporate processes to low taxation regimes, through to virtualisation of corporate activities coupled with replacement of employees with zero-hour contracts, each running micro-businesses that move in and out of existence across many tax geographies.
10. Underlying many of these pressures are the twin themes of increased global interconnectedness and the resulting increase in the tempo of change and innovation. This has handed businesses and individuals a tax agility beyond the current systems of even the most responsive revenue agency. On top of these technological advances, that have made assessment and collection processes less straightforward, there have been a number of challenging factors over recent years that have placed strain on the relationship between taxpayers and the state. These include Brexit, changes in societal attitudes to work, a growing public disquiet about the fairness of tax policy as the gap between rich and poor

increases, scaremongering about immigration and most recently the perceived handling of COVID-19 and each of these may increase resistance to tax.

11. Direct taxation is where these human factors are most likely to exert negative pressure on compliance. In personal taxation compliance is largely achieved by public acceptance and where absent then a belief in the ability of the state to identify and punish non-compliance. This element of taxation has a strong link to fairness and 'paying your way' and is often viewed as a consumption tax covering health, social care, social security, education, police, defence and a pension.
12. Corporate compliance has been a high-profile media circus over recent years with much attention being paid to corporate avoidance. Whilst there may be some shareholder pressure it is the strength of the compliance regime that is likely to be the critical influence upon businesses. This is very much seen as a necessary cost of doing business in the UK that has benefits in terms of market access, infrastructure, legal system, international reputation, stability, security, skills etc.
13. When it comes to indirect taxes then Brexit is likely to put pressure on duties as the system faces the additional workload expected. Sales tax or VAT is perhaps the most resilient levy as the cashless society grows and it becomes an automatic feature of transacting in a modern economy.
14. Wealth taxes such as IHT and CGT remain largely unchanged in principle despite being seen to be soft on the better-off in society. Council Tax, although often viewed as a consumption tax covering local roads and amenities, such as dustbin collection, should realistically be considered a wealth tax. However, since the Poll Tax protests of the early 1990s, every subsequent government has postponed the domestic property revaluation and hence policy has stagnated.
15. Finally and significantly, the impending recession, which will see a >10% economic contraction and even greater squeeze on taxable profit and income, clearly presents a very significant short-term threat to the baseline tax yield. Yield could be diminished further by an increased tax gap driven by non-compliance due to the economic pressures and additional structural shrinkage may occur due to the unknown effects of post-Brexit business relocations.

Q2. WHAT MORE CAN THE UK DO TO PROTECT ITS TAX BASE FROM EROSION AS A RESULT OF GLOBALISATION AND TECHNOLOGICAL CHANGE, AND WHAT FURTHER IMPACTS WILL THE CORONAVIRUS PANDEMIC HAVE ON OUR TAX BASE?

16. Erosion of some aspects of the UK's traditional tax base is inevitable as globalisation continues to present opportunities for organisations to distribute business operations internationally whether for cheaper labour costs or to take advantage of attractive tax regimes or both. This is an area where industrial strategy working in conjunction with exchequer policy must play its role in ensuring the UK is an attractive destination for business operations.

17. Such a cross-cutting approach could see BEIS and Treasury working collaboratively and - as they develop such an approach - would bring delivery elements from DfE and DWP into the collaboration to ensure consideration of future workforce and skills requirements. Ensuring this fits with wider policy objectives might offer opportunities to offer significant tax incentives. An example might be for companies that either contribute solutions in the zero-carbon economy or who operate zero or negative carbon business operations to get a sliding scale of discounts against corporation tax. Another approach would be to reward companies with tax credits where they themselves provide specific *measurable* training and re-skilling that eliminates *established* DfE or DWP requirements and Treasury can make corresponding savings.
18. Critical to such an approach is the ability to measure the extent of compliance against a scale of performance measures offering various discounted rates and the agility to adopt a variety of such measures in the future economy. However, simplicity must be at the heart of such schemes and should be a design imperative if we are to move away from our legacy of complex intertwined tax law that has a huge administrative burden on corporates, individuals and the state apparatus.
19. When it comes to technological change there is similarly no succour from seeking to foil sensible technology-based modernization of the future working practices of businesses and citizens. Instead we must consider how income or wealth are generated and how this is enabled by the state and hence determine ways in which we tailor taxable assessments accordingly.
20. Digital tax assessment is clearly the most effective approach and looking to new technologies like blockchain could offer innovative solutions to ensuring that tax obligations are automatically discharged by taxpayers and correspondingly that discounted rates are appropriately applied by the collection authorities.
21. COVID-19 has thrown the future of work into sharper focus. With increased automation and the promise of ever greater machine autonomy, the prospect of work for all needs re-examination and this presents an even greater paradigm shift in the role of the state in society. The question of providing an appropriate socially acceptable leisure-work balance whilst retaining incentives for innovation and productivity is not an immediate one, but any change to the workings of the state's financial apparatus should consider this future and seek to avoid any regime that would make such a transition more troubled.

**KEY THEMES: SIMPLE BASELINE - CONTINUOUS MONITORING – CONNECTED GOVERNMENT -
DIGITAL TAXATION – FLEXIBLE SYSTEMS – DATA DRIVEN PROCESSING – RAPID
SIMULATION, TEST, ROLL-OUT & REFRESH**

Q3. DO THESE PRESSURES NEED TO BE MET WITH TAX REFORM, AND IF SO, IS THIS THE RIGHT TIME FOR REFORM?

22. In the short to medium term, maintaining or increasing exchequer receipts to fund the recovery now and then start to repay the deficit is unavoidable. Some factors contributing to this situation are a consequence of global factors whilst other pressures are specific to the post economic situation.

23. Global conditions are unlikely to reverse, meaning tax reform will be required to modify tax regimes or identify entirely new regimes altogether. The immediate consequences of COVID point to the need for such reforms to occur now or at least soon. Change now will also enable measures to stimulate new economic growth to be built into the new tax landscape.
24. As short-term tax receipts are likely to be depressed as we exit the pandemic, this presents an opportunity to make radical changes, as errors in modelling of the proposed new taxes are likely to be small compared to the overall variations in yield versus historic forecast. At its greatest scope, this could even enable the entire historic legacy tax system to be complete overhauled removing legacy problems.
25. Given advances in computing power, it should be possible to devise a totally new tax regime from the ground-up and conduct microsimulations across the entire economy to model impact on individuals, businesses and to an extent international trade. This would enable Treasury and wider policy makers to look at what-if scenarios using appropriately enhanced historic company and individual tax return data.
26. Once the new regime is launched the simulation models would then receive the real world data enabling them to adjust to the actual resultant economy and providing a continuous monitoring capability with ever more accurate and well understood scenario modelling capabilities to fine tune the economy in the future.

KEY THEMES: REFORM NOW - CONTINUOUS MONITORING – DATA DRIVEN - ADJUSTABLE - SIMPLE

Q4. WHAT OVERALL LEVEL OF TAXATION CAN THE ECONOMY BEAR WITHOUT UNDESIRABLE OR COUNTERPRODUCTIVE HARM TO ECONOMIC GROWTH?

27. The complexity of the current system of taxes, thresholds, tax reliefs and allowances makes this question and any answer highly specific to a particular industry or demographic. Insight would normally be addressed via an economic model that used historical sensitivity to tax changes to understand the points at which tax yields are negatively affected by positive rate changes.
28. Given the unprecedented economic situation these traditional models may need to be augmented or adjusted via the inclusion of scenario simulation modelling techniques. However, this question also implies that it is the overall rate of taxation that is important whereas it is more likely that certain taxes may stifle creation of new jobs, others may reduce domestic consumer spending, exports may be affected by others and some may have longer term effects on inward wealth investment. This distribution of effects is likely to vary between sectors.
29. Simplification of the taxation system would not only make policy more straightforward to analyse but it would also make the administration by payers much less burdensome and provide greater transparency to government finances. Reform of taxes rather than rate changes perhaps offers a way to soften any increases and ensure sector recovery is addressed.

30. It should also be taken into account that the current levels of non-compliance and fraud that beset the government place unnecessary additional burdens on the taxpayer - and efforts to reduce this drain on resources should be prioritised to reduce losses and to maintain taxpayers' faith in the fairness of the system.

KEY THEMES: SIMPLIFY – GREATER TRANSPARENCY – FAIRNESS - LEVELLING – COUNTER-FRAUD

Q5. WHICH AREAS OF THE TAX SYSTEM ARE MOST IN NEED OF REFORM, AND WHICH ARE BEST LEFT ALONE?

31. No part of the tax system should be considered as out of scope for reform however interim schemes may be appropriate where major investments have been predicated on existing regimes. However, the need to reform is paramount and there will always be winners and losers. It should be possible to identify these segments during the design process.

KEY THEMES: SIMPLIFY – GREATER TRANSPARENCY – FAIRNESS

Q6. WHAT REFORMS SHOULD BE CONSIDERED IN RESPONSE TO THE PRESSURES ON THE TAX SYSTEM?

32. SAS has no specific ideological recommendations, but simplification would seem sensible. As a low productivity nation in relation to its geodemographic peer group then personal tax ought not to excessively penalise on the basis of income and instead the progressive focus might shift towards wealth in individual taxes. Given technological advances and the prevalence of electronic transactions then indirect taxation may offer a way to tax non-essential spend and this could continue as per VAT or could be re-imagined.
33. Local taxation offers a new tax potential and given the effects of austerity, the light shone upon local governments' role in the pandemic, the spending gap in respect of adult social care and the broader devolution agenda it would seem sensible to explore both individual and business tax exploitation within existing or redefined council tax billing areas.
34. Another option could be to retain a council tax charge linked more directly to the consumption of local services and create a new wealth tax based on property attributes. The creation of a such a charge would eliminate the current valuation-based banding which seems to fuel disputes. This wealth-based charging would potentially offer an opportunity to exclude the sole dwelling property from IHT with its attendant issues.
35. Whether indirect taxes or local income tax, the technology exists for assessments to be carried out electronically as a national service and apportionment to local authorities conducted by central revenue services. A cloud-based service model for "smart-taxes" would enable central services such as fraud prevention, compliance and enforcement whilst permitting local authorities the ability to vary headline contribution rates and deploy local tax reliefs or hardship schemes.

KEY THEMES: SIMPLE – TRANSPARENT – LOCAL – SMART-TAXES – WEALTH - TRANSACTION

Q7. WHAT IS THE ROLE OF TAX RELIEFS IN REBUILDING THE ECONOMY AND PROMOTING ECONOMIC GROWTH AND EFFICIENCY? DOES THE CURRENT REGIME OF TAX RELIEFS PERFORM THIS ROLE WELL?

36. Tax reliefs are without doubt an effective way to nudge or coerce businesses to invest in certain ways or adopt certain behaviours. The opportunities to abuse them and the lack of a uniform uptake makes their fairness questionable and beyond qualitative commentary SAS has no data upon which to base a recommendation. Any such schemes should be the subject of continuous monitoring to ensure the desired outcomes are being achieved and action taken to modify or replace schemes that are not providing the expected outcomes.

KEY THEMES: SIMPLE – FAIR - TRANSPARENT – CONTINUOUS MONITORING

Q8. WHAT ARE THE AREAS FOR SIMPLIFICATION?

37. Perhaps the most obvious area for simplification would be to make clear distinctions between individuals and companies. It should not be possible to create special purpose shell companies to shield personal income from appropriate taxation whilst allowing companies to shirk responsibilities for employee-based taxes. Redefining taxable entities would solve many issues of fairness and avoidance and the concept of self-employment is at the heart of such simplification.
38. National Insurance no longer has any ring-fenced concept and should be harmonised into income tax or shifted to local taxation as discussed in question 6.

KEY THEMES: SIMPLE – FAIR - TRANSPARENT – MODERN

Q9. IS THERE A ROLE FOR WINDFALL TAXES IN THE POST CORONAVIRUS WORLD?

39. No answer.

KEY THEMES– FAIR - TRANSPARENT – CONTINUOUS MONITORING

Q10. WHAT IS THE RIGHT BALANCE BETWEEN TAXATION OF WORK, SAVINGS/PENSIONS AND WEALTH?

40. No answer.

KEY THEMES: SIMPLE – FAIR - TRANSPARENT – CONTINUOUS MONITORING

Q11. WHAT IS THE BEST WAY TO TACKLE TAX REFORM, INCLUDING WHAT CHANGES MIGHT BE NEEDED AT HMRC TO SUPPORT IMPLEMENTATION, AND HOW SHOULD THE GOVERNMENT CONSULT WITH STAKEHOLDERS AND PARLIAMENT?

41. A major obstacle to tax reform has been the sheer complexity of Britain's tax system. Any Chancellor seeking to make changes would be (sensibly) advised by officials that any large perturbations in the tax system might have unforeseeable far-reaching consequences both

on tax yield and wider economic activity. One reason for such caution is that Treasury tax forecasts will have been developed and refined over many decades like the taxes they represent and whilst they may work within certain parameters their fidelity outside such limited divergence may be less certain.

42. Anyone following the Treasury's adjustments with rates of tax and duty over the years will be aware that changes have rarely reached double-digit percentage levels as a consequence of this uncertainty inherent in available forecasts. But as we entered this pandemic, HM Treasury took bold steps based on a simple premise that preserving the economic apparatus of companies and employees would offer a much easier route to restart the economy versus trying to rebuild entire supply chains and business ecosystems from a wholesale collapse. It was a leap into the unknown based on sound logic and now given the emergence of three viable vaccines by December 2020 is likely to have paid off.
43. To achieve their goals Treasury called upon HMRC to rapidly rollout a number of schemes to protect individuals and companies and in doing so HMRC themselves operated outside their traditional comfort zone and systems were assembled and put into service in weeks that would previously have taken many months to bring into service. Whilst not wishing to advocate a cavalier approach, it is this spirit of bold endeavour born out of necessity that is required now. HMRC should be congratulated for delivering but if we return to the traditional transformational cadence of decades rather than weeks then an opportunity will have been lost.
44. HMRC have a stated ambition of throwing off the shackles of their legacy tax estate and a wholesale reinvention of the tax landscape would ensure that they could literally switch off the baggage of the past and deliver a tax system for the 21st century. Perhaps now is the time for such bold action as it is unlikely that this opportunity born of calamity will present itself again for decades.
45. The taxation systems devised by former Soviet Bloc countries have benefitted from a clean start rather than the centuries of layered tax law that the UK has amassed, and it might be constructive to examine their systems and the lessons learned by them after a quarter of a century in operation.
46. In developing from scratch, new tax concepts or smart-taxes could be incorporated such as time-sensitive road usage or off-peak versus peak energy taxes based on smart meters. Digital taxes and crypto-asset taxes could also be accommodated. The options are many and further consultation would be necessary to ensure the widest range of ideas are considered.
47. Technology should not be an obstacle nor should it dictate the solution but in modelling future tax options and providing simulations to explore the possible interactions it can certainly help in design. Simulations can act as a vehicle with which to engage stakeholders and give Parliament confidence in the way any new system will operate. Interactions with other government and wider systems can also be tested and this may provide additional avenues for innovation both in concept and scope as well as delivery.

KEY THEMES: SIMPLE – BOLD - TRANSPARENT – INNOVATIVE - MODERN -SMART-TAXES

December 2020