
Mark Pont, Assessment Programme Lead

Sean Whellams
Head of Profession for Statistics
HM Revenue & Customs
(by email)

16 May 2019

Dear Sean

COMPLIANCE CHECK ON HMRC MEASURING TAX GAPS STATISTICS

We recently completed our check of the compliance with the [Code of Practice for Statistics](#) of HMRC's [Measuring Tax Gaps](#) (MTG) statistics. While these statistics are not National Statistics because some of the components are not sufficiently robust for National Statistics publication, they are important official statistics valued by users and there would merit in conducting a check of compliance against the elements of Code of Practice for Statistics particularly:

- in respect to trustworthiness, we looked at orderly release and transparent processes and management;
- in quality, we reviewed aspects of using sound methods to produce the statistics and how you assured quality; and
- in the public value, we considered the relevance of the statistics to users, the clarity of the insights which the statistics offer to users and how HMRC is innovating and improving them

Your team has proven to be highly committed and engaged when working to enhance the trustworthiness, quality and value of these statistics. We found that HMRC's leadership of the measurement of tax gaps was cited by eminent bodies such as the International Monetary Fund (IMF) and the National Audit Office. These are important statistics making a vital contribution to informing the national discussion around tax fairness and tax compliance.

We commend the preparation, production and publication of the MTG statistics, for example:

- The main headline statistic – the overall scale of the gap – is front and centre of MTG and is quoted to the nearest billion pounds to help users understand the approximate accuracy of the estimates
- The MTG statistics are valuable tools in helping HMRC make the best use of its resources. The MTG statistics help HMRC make detailed analysis of risks such as those to maximising tax yield. These analyses then contribute to the development of HMRC policy, strategy and operational activity in relation to the different taxpayer customer groups
- The annual MTG statistics publication includes an estimate of the hidden economy and in [MTG 2017](#) you introduced a revised hidden economy methodology using new data from a hidden economy survey commissioned by HMRC. HMRC's model for estimating the scale of the hidden economy helps gain access to a hard-to-reach population and achieve honest responses to a sensitive topic
- To enhance the quality of these statistics, HMRC proactively engages with external stakeholders by presenting findings at relevant external forums and working alongside experts on methodology improvements. For example, HMRC is collaborating with the Danish authorities on risk-based audits exploring variables for the entire population and management of HMRC's random enquiry programme. We commend you on your international outreach

- HMRC has chosen appropriate data sources to calculate the MTG statistics. HMRC has assessed and minimised the impact of any data limitations for use, and has explained these well in a detailed [methodological annex](#).

We identified some areas where we consider that you could reinforce the trustworthiness of these statistics through enhanced transparency, demonstrate more openly the quality of the estimates and seek wider engagement with a view to further exploiting the considerable public value that the statistics offer. The detailed areas are:

1. Showcasing the value of collaboration on the methods for measuring tax gaps with international and academic topic and methods experts can contribute to greater trustworthiness of these statistics when stakeholders, commentators and users see that HMRC is world-leading in measuring tax gaps and is setting the bar for others to follow
2. HMRC could take steps to test whether there is an appetite from users for more nuanced reporting of tax gaps in line with the IMF proposals; and if there is, re-examine its technical capability to produce such estimates. This could provide opportunities to widen the uses of the statistics to new and existing users and potentially offer new insights into the effectiveness of the UK tax system
3. HMRC should report to its methods governance body on the outcomes of the review of its continued use of US Internal Revenue Service research for multipliers. Particularly whether these continue to represent international good practice, scientific principles, or established professional consensus. This might better reflect in the statistics, the current behaviours of taxpayers in the UK and potentially supplying more-robust estimates of tax gaps
4. HMRC should review whether its assumptions about under-reporting of alcohol consumption continue to represent established professional consensus. This could offer more assurance that the alcohol tax gaps statistics represent the current behaviours of taxpayers in the UK and lead to more-robust estimates of tax gaps
5. HMRC to consider linking in the MTG publication to research based on analysis of the tax gap data. This recommendation could help HMRC not only draw attention to the valuable insight that the Institute for Fiscal Studies brought out of HMRC's data but also publicise the availability of data to approved researchers in Datalab. The greater use that can be derived from HMRC's microdata can enhance the public value of the data
6. HMRC to consider whether the public value of these statistics and data could be enhanced within the budgets available, through examining the potential to meet users' priorities beyond HMRC staff. Widening engagement might help HMRC to better meet the needs of a wider sets of users when considering where to place its limited development time and funds for these statistics. Additionally, externally verified evidence improves the prospects for people seeing the findings as high-quality, robust and independent.
7. Where appropriate, provide comparisons to support interpretation of the tax gaps statistics and data, signpost to relevant statistics, and explain consistency and coherence. This might better help users with interests in fiscal impacts by helping them judge the prospects for future tax raising.

We have included more detail about our judgement and more detail about the recommendations in an annex to this letter. Our Economy Domain Lead, Iain Russell, has agreed with your team that they will continue to engage with each other on progress over the coming months. I would welcome a formal update from you by end of October 2019 about how you have addressed these areas.

Thank you for engaging effectively with us during this review. Please let me know if there is any aspect of this letter that you wish to discuss. I am copying this letter to Anthony Burke as responsible statistician for the Measuring Tax Gaps statistics.

Yours sincerely



Mark Pont
Assessment Programme Lead

Annex: Detailed Findings

The Measuring Tax Gaps (MTG) statistics are Official Statistics. Official Statistics should meet the highest standards of **public value**, be **high quality** and be produced in a way **worthy of trust** and comply with all aspects of the *Code of Practice for Statistics* (the *Code*). The Office for Statistics Regulation (OSR) agreed with HMRC that the MTG statistics are important official statistics and there would be merit in conducting a check of compliance against some relevant aspects of the *Code*.

We found many positive aspects in the way that HMRC produces and presents these statistics. We also identified areas that we think HMRC could strengthen compliance with the *Code* and we have made recommendations.

1. Building trustworthiness through external challenge and transparency

HMRC proactively engages with external stakeholders by presenting findings at relevant external forums – for example, a [Joint Initiative Steering Group](#) that includes representatives from across the key tax agents' representative bodies, for example the Chartered Institute of Taxation and the Association of Taxation Technicians. HMRC also presents at ad hoc events, for example it provided a teach-in and overview of the tax gap to the Institute for Chartered Accountants in England and Wales (ICAEW). HMRC also provides support and teach-ins to visiting revenue agencies and ministries of finance – for example in 2018 it presented on estimation methodologies to representatives from Vietnam, Rwanda, Ghana and Turkey.

In September 2018, HMRC hosted its first International Tax Gap Conference on '*Overcoming obstacles to tax gap measurement*'. The event was attended by more than 50 guests attending from tax authorities and finance ministries worldwide. Presentations and panel discussions during the conference featured speakers from HMRC, along with other tax organisations such as Canada Revenue Agency, Australian Taxation Office and the International Monetary Fund (IMF). Speakers talked about their measurement approach and strategies to tackle tax gaps, focusing on particularly tricky areas including the hidden economy and offshore hidden wealth.

HMRC told us that it had invited external topic experts to examine the way that it measures tax gaps as well as occasions where HMRC's approach is subject to external scrutiny. An example of the latter is audit by the National Audit Office (NAO). After one such recent audit, the NAO considered HMRC's estimate of the tax gap "*to be a useful indicator of the scale and nature of non-compliance with the tax rules, and of HMRC's long-term performance*".¹ An example where HMRC invited external scrutiny was in 2013, when it invited the IMF to examine its approach to measuring tax gaps. The IMF concluded that HMRC produces one of the most comprehensive studies of the tax gap available internationally².

HMRC also told us about recent examples where it had collaborated externally with topic experts including:

- With the IMF, on proposed Corporation Tax Large Business model revisions. HMRC tax gap team members also sit on a group to develop guidance for a personal income tax gap methodology
- With the Danish authorities, HMRC collaborated on risk-based audit methodology exploring population variables and management of its random enquiry programme
- With UK academics from the [Tax Administration Research Centre](#) based at the University of Exeter, HMRC is discussing approaches to using a combination of random and risk-based audits for estimating the tax gap

Finding 1 HMRC's international outreach is contributing to bringing in new ideas and expertise to improve the statistics and we commend HMRC for its work here. We found an example of a tax authority (Australian Tax Office) which is transparent about its engagement with stakeholders, statistics users and topic experts and explains how these contribute to more robust reliable tax

¹ <https://www.nao.org.uk/wp-content/uploads/2015/07/HMRC-Standard-Report.pdf>

² <https://www.imf.org/external/pubs/ft/scr/2013/cr13314.pdf>

gaps statistics. HMRC does not make public very much about its outreach and collaboration with topic experts. We consider that HMRC could build even greater assurance in users about the reliability of the estimates of tax gaps through greater transparency about its collaborations.

Recommendation 1 HMRC could showcase the value of its collaboration with topic and methods experts, to help enhance the trustworthiness of these statistics when stakeholders, commentators and users see that HMRC is world-leading in measuring tax gaps and is to a large extent setting the bar for others to follow

We see the benefit of HMRC being transparent about its international collaborations as:

- helping to build the trustworthiness of these statistics when stakeholders, commentators and users see that HMRC is world-leading in measuring tax gaps and is to a large extent setting the bar for others to follow
- encouraging greater exploitation of the international network to fund and work on joint development projects to further the science of measuring tax gaps from a suitably wide range of organisations and individuals

2. Quality and Methods

HMRC has many years of experience of calculating tax gaps. Estimates of the UK indirect tax gap were published from 2001. The data sources used to calculate the tax gaps seem to be the most appropriate data to meet the intended uses. The impact of any data limitations for use has been assessed, to an extent minimised and explained by HMRC in a detailed methodological annex³. Indeed, the methods used are very well explained. The IMF said *“No measure of the tax gap can be definitive, and there will always be uncertainties inherent in such a calculation. HMRC must also balance the cost of refining its estimate with the added value such additional work would provide. We consider it useful that HMRC has produced a measure of the tax gap as an indicator of the scale and nature of non-compliance with the tax rules, and as a broad indication of its performance over time”*

There are some areas in respect to the methods adopted which have an impact on the quality of the estimates of the tax gaps where the IMF made recommendations and one which we picked up from our own analysis of the methods. These are set out below:

a IMF Recommendation around more nuanced reporting of the tax gaps.

Finding 2 HMRC’s current approach to calculate gaps using a ‘net-gaps with anticipated collections basis’, while a useful and valuable headline measure, involve estimates with higher levels of uncertainty around the success of future compliance activity. HMRC invited the IMF to review its approach to measuring tax gaps. Among other recommendations, the IMF recommended⁴ that HMRC look at reporting tax gaps in three ways, the “gross gap,” the “net gap,” (the actual gap after compliance at a specific date) and then the net gap with anticipated collections (i.e. the way HMRC currently measures the gap)⁵. IMF took the view that reporting on the three bases would provide a more nuanced breakdown of revenue collection performance over time and for specific periods. By only adopting the net gap with anticipated collections, the statistics offer more-limited value.

HMRC did not adopt the IMF’s recommendation about more-nuanced reporting because it did not think this was practically possible due to the different methods that it used to calculate the gaps⁶.

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/715744/HMRC-measuring-tax-gaps-2018-methodological-annex.pdf

⁴ <https://www.imf.org/external/pubs/ft/scr/2013/cr13314.pdf>

⁵ The IMF defined the gross gap as being the gap as measured at the due date for payment of tax liabilities, and the net gap as the gap at the time of measurement. The net gap with anticipated collections is how the IMF defined what the HMRC is currently reporting. Using the latter approach HMRC considers not just the yield from current compliance activity but yield from in the future from previous, current and future compliance activity

⁶ the hidden economy methodology did not use compliance yield as part of the calculation. HMRC also argued that presentation of a gross gap and net gap number could be misleading in that it could be

We found some evidence that there is interest from people wishing to use tax gaps statistics to examine the success of the UK's tax system with respect to tax certainty⁷ and convenience or ease of paying. Their needs might be better met if HMRC also reported on some of the tax gaps on a gross basis i.e. before compliance activity.

Recommendation 2 HMRC could take steps to test whether there is an appetite from users for more-nuanced reporting of tax gaps in line with the IMF proposals; if there is, it could re-examine its technical capability to produce such estimates.

We see the benefits of implementing the recommendations as:

- providing opportunities to widen the uses of the statistics to new and existing users
- potentially offering new insights into the effectiveness of the UK tax system

b IMF recommendation about adopting domestic UK multipliers to arrive at gaps calculated from random audits

Finding 3 HMRC estimates in a consistent way the total undeclared liability which is comparable between years for each taxpayer segment⁸. HMRC adjusts the results from its random audit program by what are termed “multipliers” to account for undeclared liability. From estimates derived from the random audit estimates most of the multipliers being used are cited by HMRC as being from “US Internal Revenue Service research”. HMRC told us that it had not updated the multipliers used to calculate total gaps from random audit data since it first started using them. The IMF, in its 2013 report, recommended that HMRC determine domestic UK estimates for these multipliers.

In December 2016, HMRC started a review to establish whether domestic UK multipliers could be developed. However, small changes to the multipliers would have significant consequences for the results and HMRC is rightly cautious about how it proceeds. HMRC told us that it will apply revisions to multipliers when there is quantifiable evidence that new, more-accurate multipliers have been produced, that do not negatively impact transparency, timeliness or user acceptability. We welcome HMRC's review of the potential to generate new domestic multipliers, particularly as this is a very difficult and complex area.

Recommendation 3 HMRC should report to its methods governance body on the outcomes of the review of its continued use of US Internal Revenue Service for multipliers. Particularly whether they continue to represent international good practice, scientific principles, or established professional consensus.

We see the benefits of implementing the recommendations as:

- better reflecting in the statistics, the current behaviours of taxpayers in the UK
- potentially supplying more robust estimates of tax gaps

c Alcohol consumption multipliers

Finding 4 HMRC uses multipliers (HMRC calls multipliers ‘uplift factors’ but for consistency with other references to multipliers we will call them multipliers) to compensate for the under-reporting by consumers of their levels of alcohol consumption. It is known that there is a tendency towards under-reporting of alcohol consumption in expenditure surveys⁹. HMRC's explanations of how it calculates multipliers are comprehensive and it is clear that assumptions about under-reporting have been unchanged for several years. Additionally, HMRC does not publish the calculated multipliers. It may or may not be reasonable for HMRC to assume that under-reporting of alcohol consumption has not varied over the years since they were first calculated but HMRC does not provide re-assurance that it has reviewed these assumptions.

interpreted that the gross gap is what is collected without any intervention, and the net gap is the sole indicator of administrative action.

⁷ Tax certainty is where the amount a natural person or business must pay, should be certain and not arbitrary. It should be certain to the tax payer how much tax is to be paid, to whom and by what time

⁸ Taxpayers are segmented into natural persons and businesses

⁹ <https://www.statslife.org.uk/features/9-gap-between-perception-and-reality-not-such-big-news>

Recommendation 4 HMRC should review whether its assumptions about under-reporting of alcohol consumption continue to represent established professional consensus.

We see the benefits of implementing the recommendations as:

- helping HMRC determine whether its capability to make enhancements to the statistics are both possible and allow it to better meet user needs
- providing more assurance that the alcohol tax gaps statistics represent the current behaviours of taxpayers in the UK
- supplying more robust estimates of tax gaps

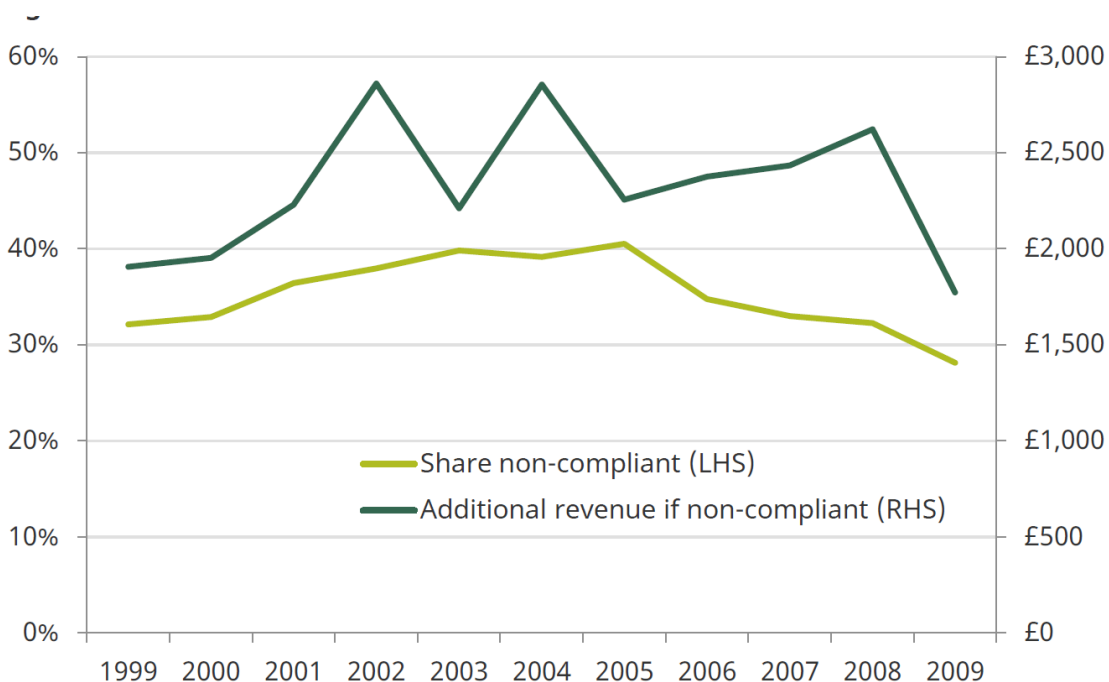
d Revisions

Finding 5 HMRC gives a good explanation of the scale, nature of revisions to the tax gaps statistics. It publishes an initial estimate of the tax gap around 15 months after the end of the tax year to which the tax gaps apply. Some components are projected and revised as new data become available, resulting in revisions to the tax gap measure in subsequent publications.

e Appropriate signposting to innovative uses of tax gaps data

Finding 6 HMRC has a wealth of data from its random audit programme particularly around non-compliance. In October 2017 the Institute for Fiscal Studies, published this research [Who does and doesn't pay taxes?](#) using tax gap random audit dataset accessed through HMRC's [Datalab](#). As shown in Figure 1 below, these data suggest that non-compliance amongst those who self-assess their tax liability has, over the longer term, remained relatively static, rising from 30 per cent to 40 per cent of self-assessment taxpayers in the early 2000s, before declining back to 30 per cent by 2009¹⁰.

Figure 1: Results from HMRC random audits of self- assessment returns



Source: [Institute for Fiscal Studies Who Does and Doesn't Pay Taxes](#), October 2017

The amount of tax owed by the non-compliant has also remained stable, at between £1,800 and £2,900 per taxpayer, with no clear upwards or downwards trend. We commend HMRC on making access to data available through Datalab and the new insights that researchers gain from analysing the data.

¹⁰ The data available to the IFS covered tax returns for the years 1999–2009

HMRC's 2018 publication did not include a link to the recent research based on its random audit data and the access granted by HMRC to the data in its Datalab.

Recommendation 5 HMRC might consider linking to research in the Measuring Tax Gaps publication to research which is based on analysis of the tax gap data.

We see the benefit of implementing this recommendation as not only drawing attention to the valuable insight that the IFS brought out of HMRC's data but also publicising the availability of data to approved researchers in Datalab. The greater use that can be derived from HMRC's microdata data the greater is the potential for improving the public value of the data.

3 Enhancing public value

a Enhancing the public value of these statistics through widening the scope of engagement

We reviewed the role of external stakeholders and topic experts in reviewing, and where appropriate challenging, the quality of source data, and decisions about methods. HMRC told us that its governance arrangements involved mainly, but not exclusively, internal HMRC users in helping prioritise statistical plans. The chart below outlines the governance groups for these statistics and their responsibilities:

Level & Name of Group	Purpose	Membership
Top Level – the Tax Gap Governance Group (TGGG)	Signs off tax gap estimates prior to publication	HMRC Customer Compliance Group (CCG) ¹¹ and Customer Strategy and Tax Design Deputy (CS&TD) ¹² Directors plus HM Treasury Representative
Tax Gap Steering Group (TGSG)	Represents the main HMRC tax policy and operational groups regarding decisions, assurance and presentation / briefing on tax gaps. It formally signs off methodological issues/assumptions recommended by the STGWG	HMRC CCG & CS&TD Deputy Directors
Stakeholder Tax Gap Working Group (STGWG)	Agrees methodology updates and recommends to TGSG	HMRC Tax Gaps team, statisticians, analysts, tax specialists and some stakeholders
Analytical Tax Gap Working Group (ATGWG)	Reviews tax gap development, guidance on development, peer-review of methodology and quality assurance of statistics	Same as STGWG without stakeholders

Finding 7 The governance arrangements and our discussions with the statistical team producing the statistics is strongly indicative that the principal government policy users of tax gap statistics

¹¹ Tackles non-compliance and enforcement for all customer groups, including large businesses

¹² CS&TD brings together customer strategy, tax policy, process design and tax assurance teams

and data are at the centre of statistical production: their needs are understood, their views sought and acted on, and their use of statistics supported. We found that while HMRC communicates with some of the users of these statistics in the tax community there are few opportunities for it to engage with them on their views of the statistics and on their future development. Given the limited analytical resources available to HMRC, the best prospects for developing these statistics beyond meeting the needs of internal HMRC users is to look also at the needs of wider users in academia, think tanks and advocacy organisations based on research using the tax gaps statistics and data. The results from casting the net more widely may be opportunities for a blended development programme which furthers the interests of a both internal HMRC users and the wider group of users.

Recommendation 6 We recommend that HMRC consider the extent to which the public value of these statistics and data can be enhanced within the budgets available, through examining the potential to meet other users' priorities beyond HMRC staff.

We see the benefit of HMRC widening its engagement beyond internal HMRC staff as:

- helping HMRC to better balance the needs of a wider sets of users when considering where to place its limited development time and funds for these statistics. Additionally, externally verified evidence improves the prospects for people seeing the findings as high-quality, robust and independent.

b Enhancing the public value of the statistics through providing comparisons to support interpretation of the tax gaps statistics and data, signpost to relevant statistics, and explain consistency and coherence

Finding 8 HMRC helpfully provides, in tables accompanying the tax gaps statistics, breakdowns on tax revenues and volumes for the different alcohol products. HMRC also issues separate statistical bulletins on collections from taxes that relate to industry or product-specific goods and services such as tobacco or alcohol duties or specific environmental taxes. The Office for Budget Responsibility (OBR) also publishes economic and fiscal outlooks, which include forecast tax revenues. If users followed links to the OBR's analysis they could gain additional insight into the fact that there is a declining tax base for these taxes due to falling alcohol consumption and that these are only partly offset by rises in duty rates based on the Government's stated duty uprating assumptions, which raise the effective tax rate. HMRC might provide further opportunities to enhance the public value of these statistics through publishing links in MTG to:

- appropriate accompanying tables on the breakdowns of tax revenues and volumes for the different taxed products
- the separate tax statistics bulletins issued by HMRC
- OBR economic and fiscal outlooks forecasting future tax revenues

Recommendation 7 Where appropriate, HMRC should provide comparisons to support interpretation of the tax gaps statistics and data, signpost to relevant statistics, and explain consistency and coherence.

We see the benefits of implementing this recommendation as:

- allowing users with interests in fiscal impacts to better estimate the prospects for future tax raising
- providing users with the opportunity to better understand what's happening in markets where products are taxed
- helping users see changes in the patterns in markets, for example changes of trends in alcoholic drinks consumption.

c Well-presented statistics

Finding 9 There are many aspects to praise in the presentation of the MTG statistics, for example:

- the main headline statistic – the scale of the gap – is front and centre of MTG and is quoted to the nearest billion to help users understand the approximate accuracy of the estimates

- there is a brief explanation of how HMRC defines a tax gap
- HMRC explains in three brief bullet points why it measures tax gaps
- HMRC discusses why there are tax gaps and summarise how it calculates them
- HMRC clearly caveats that the estimates in MTG are their best estimates based on the information available and that many sources of uncertainty and potential error exist. We see this as appropriate comment to help users appreciate the uncertainty in the estimates.

d Equality of access

Finding 10 The statistics and data are equally available to all, not given to some people before others. They are published at a sufficient level of detail and remain publicly available. Generally, the statistics and data are presented clearly, explained meaningfully and provide authoritative insights that serve the public good. We think that HMRC has been creative and motivated to improve statistics and data.