

## Developing a Tax Complexity Index for the UK

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### ABSTRACT

Mainstream tax models have tended to assume away costs of changing legislation, thought of as differences in the inherent complexity of one area of tax code as against another. The UK Office of Tax Simplification (OTS) is developing a methodology for measuring the relative complexity of different parts of the UK tax system to derive a tax complexity index. This development is addressed primarily for tax administrations which are setting out to tackle what is meant by tax complexity. The aim for the UK is to come up with a practical tool to help the OTS rank, and so prioritise areas of the HMRC tax code, which would benefit from putting specialist resource into simplification of the appropriate parts of the system. Such work is multi-disciplinary working across drafting legislation, developing tax policy under political priorities, public sector economists, tax practitioners, and tax officials at the end of the chain working to collect the right amount of tax.

The approach is to build up the quantitative elements as far as plausible, given that the guidance required is to be practical and pragmatic. The approach spans setting up empirical measures and scoring diverse issues such as legislative complexity, policy complexity and operational complexity of the tax system, which are informed by tax payer behavioural data. This work is conceived as contributing to measuring and evaluating the performance of tax administrations.

OTS (2012) set out the preliminary methodology behind setting up a comprehensive approach to UK tax legislation. It divided tax legislation into some 100+ broad areas with e.g. income tax sub-divided into 20 areas. It sought to score each area against some 15 standalone factors for aspects of complexity. The result is each area of tax has a score for complexity which is interpreted as a ranking of the complexity of specific areas of tax. From discussions in the past year progress has been made in seeking to refine how to define factor measures or proxy measures, and how to weight.

Ulph (2013) identified a major issue: whether, in trying to measure complexity, the aim is to measure the extent to which the tax system is **unnecessarily complex**, or whether it is trying to measure just its total/absolute level of complexity without differentiating fundamental complexity from unnecessary complexity. Ulph sought a framework for addressing whether there is an optimum level of complexity - given a policy purpose. Baron (2013) saw merit in using representative sets of tax payers with a focus on transactional analysis but excluding avoidance risk. Other consultations featured the integrity of the measure: the reliability of the weighting in

the face of double counting; and developing the distinction between fundamental and unnecessary complexity.

The OTS is presenting a revision here to stimulate further discussion, for guidance on testing the index, and looking at sensitivities to assumptions.

Keywords: Performance of Tax Administrations; Tax Complexity; improving service for HMRC customers; Legislative complexity; Measuring and scoring.  
JEL Categories: A12; H20; K34.

## **Introduction**

The OTS's tax complexity index divides the UK tax system into over 100 different areas, based broadly on the structure of tax legislation. Smaller taxes such as air passenger duty or aggregates levy are taken as one sub-division, whereas the major taxes - income tax and corporation tax - are sub-divided into around 20 and 60 self-contained areas respectively, roughly corresponding to Parts of legislation.

For each of these areas, the complexity index assigns ten factors of complexity, and combines them using weightings to come up with two separate numbers between 1 and 10. The first is for intrinsic complexity, and the second for the impact of that complexity (broadly, resource cost). The choice of complexity factors and weightings is critical to the outcome. The use of a Scenario approach is suggested as a way of developing the choice of factors and weightings. Where the Scenario has a specified objective with clear applications within the tax system, it is studied by setting weightings which adjust factors to model the conditions which are deemed appropriate. Inherent in this approach is the recognition that rankings are likely to be a robust judgmental output where a panel of experts has opined. The factors are generally difficult to measure, so are assigned a subjective value between 1 and 5, where 1 is simple and 5 is complex. Again, these subjective judgments are critical to the success of the model and are determined by the testing of the index or scenario by exposing the exercise to a panel of OTS, HMRC leads and external tax experts. The judgmental ranks are established as a consensus exercise among the experts.

The OTS complexity index is a work in progress and we would be very interested in any comments or advice. Our aim is to come up with a practical model by the end of 2014.

## **The Office of Tax Simplification**

The Office of Tax Simplification (OTS) is an independent office set up by the Chancellor of the Exchequer in 2010 for the duration of the current parliament to advise him on simplifying the tax system. It is led by an independent Chairman, Rt Hon Michael Jack, and Tax Director John Whiting and is led by a Board that includes

senior officials from HM Treasury and HM Revenue & Customs (HMRC) as well as independent members. It is staffed by a small secretariat of civil servants and private sector tax professionals on secondment, normally part-time and relatively short term. The typical complement of the OTS is around 6 full-time equivalent staff. The main task of the OTS is to carry out reviews into different areas of the tax system, gathering evidence of technical and administrative areas of difficulty and making simplification recommendations to the Chancellor. The OTS talks to, and receives submissions from, a wide range of sources, including businesses, representative bodies, tax advisers, academics and individual taxpayers, as well as HMRC (both centrally and front-line operational staff) and HM Treasury (HMT). It needs to be emphasised that the OTS has no power to change the law: it is up to Ministers to take forward our recommendations as they see fit, as advised by HMT and HMRC and usually through further consultation.

### **Origins of the OTS complexity index**

In 2011, the OTS Chairman asked that the OTS develop a means of comparing levels of complexity present in areas of the tax system so that areas for future simplification reviews could be prioritised. His vision was for a simple “star rating”, so you could say that inheritance tax was (say) a five star tax whereas air passenger duty had a two star complexity rating (where 5 is complex and 1 simple).

A wide number of groups quickly saw the potential of such an index: for instance, the OTS Board suggested that it could be used to assess new tax policy ideas, or to measure changes in complexity in the UK tax system over time. The OTS has also received interest from across government and other countries – the National Audit Office has asked whether the index could be adapted to other areas similar to taxation (such as benefits policy). Representatives from France have met with the OTS to discuss and compare development of an index of their own; we understand a very simple system is being introduced imminently to formally assess new tax proposals.

### **Defining tax complexity**

One would have thought that a good starting point for devising a tax complexity index would be to identify a definition of tax complexity. However, defining ‘complexity’ is more difficult (or complex) than is initially apparent. When it was set up the OTS carried out a review of the academic literature on tax complexity. Typically, writers do not define tax complexity but list and categorise factors that contribute to complexity.

Slemrod (1989,) listed four core attributes of tax complexity: predictability, enforceability, difficulty and manipulability. McCaffery (1990, ) distinguished between technical, structural and compliance complexity. Harris (1996,) identified policy, form and action complexities.

The OTS also looked at definitions of simplicity, such as G.S Cooper's seven criteria of simplification<sup>1</sup> or Adam Smith's<sup>2</sup> four criteria for a sound tax system, two of which appear to come under the umbrella of simplicity. The Mirrlees review<sup>3</sup> recommended simplicity as a rule of thumb which ought to be integrated into the tax system, as simplicity encourages transparency and reduces compliance costs (though the review did not identify a formal definition or criteria). Simplicity within the field of tax is usually defined by two broad criteria:

- Certainty: a taxpayer should know the results of tax they should pay before the tax is paid, and should be able to know them without too much difficulty; and
- Efficiency: a simple tax system will have low unavoidable compliance costs and have avoidable costs<sup>4</sup> which tend towards zero

The OTS Board decided that while these academic works were of interest, they did not provide a great deal of practical help in deciding which areas of the tax system were most ripe for simplification. Given the small size of the OTS and the fact that it was set up for a limited initial period, the decision was taken to focus on areas of the tax system that were likely to deliver the greatest simplification benefits for the greatest number of people. This involved looking at tax complexity from the point of view of "users" of the tax system.

### **The usability model of tax complexity**

The OTS was influenced by an early draft of Pedersen (2011), a former Danish tax official, which looked at a possible usability model for tax complexity.<sup>5</sup>

Pedersen's usability model is based on the International Organisation for Standardisation's definition of usability as "the effectiveness, resource efficiency and satisfaction with which specified users can achieve goals in particular environments"<sup>6</sup>. Pedersen applied this model to tax systems by identifying the intended outcome for different categories of users. "Usability" can then be defined as the extent to which goals can be achieved with effectiveness, resource-efficiency, and satisfaction. Two of these usability measures closely map onto the tax simplicity criteria identified above- resource efficiency closely maps onto efficiency, and effectiveness onto certainty.

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<sup>1</sup> Cooper (1993) listed the criteria as: predictability, proportionality, consistency, compliance, administration, co-ordination, expression

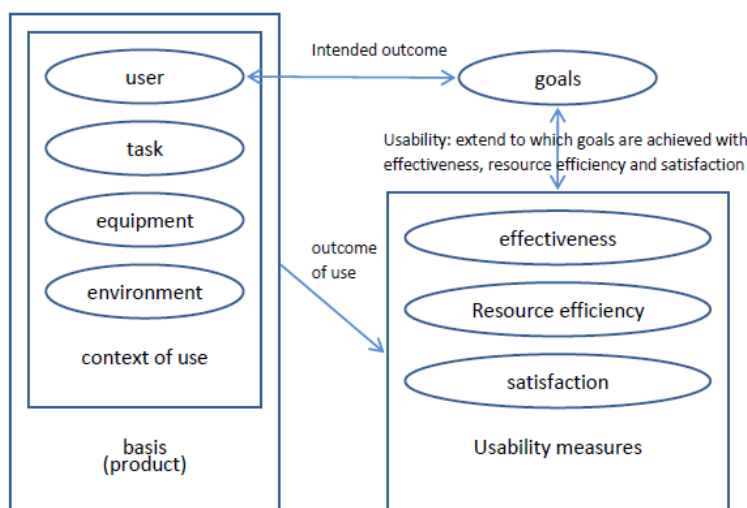
<sup>2</sup> A Lymer and L Oates; Taxation: Policy and Practice 15<sup>th</sup> ed. 2008/09; Fiscal Publication

<sup>3</sup> Sir James Mirrlees, Taxation by Design: The Mirrlees Review, 2011, Oxford University Press, pp. 42

<sup>4</sup> Johnston, K. (1963), *Corporations Federal Income Tax Compliance Costs: A Study of Small, Medium and Large Corporations*, Bureau of Business Research Monograph No. 110, Columbus: Ohio State University.

<sup>5</sup> Pedersen, an application of the concept of usability in a tax context 2011

<sup>6</sup> International Standard Organisation (ISO) (2002) definition of usability. ISO 16982



*Fig 1. The ISO definition of usability*

The ISO definition of usability is particularly helpful in understanding tax complexity as it takes into account the context of use and can separate tax measures into discrete ‘products’. A simple relief or allowance can be rendered complex by how usable it is: it could be expensive for a user to claim e.g. if the user does not have the necessary ability to understand the tax system, or if the mechanism to claim is too complicated or expressed poorly. There could also be uncertainty surrounding whether a user is eligible for the relief or allowance.

### **The OTS complexity index – first iteration**

The Pedersen model formed the basis for the initial iteration of the OTS complexity index. The index was based around choosing several factors of complexity, which in themselves were separated into the three usability categories: effectiveness, resource efficiency and user satisfaction.

An early change was to delete the category of “user satisfaction” because it was felt to be very difficult to come up with a reliable way to measure relative satisfaction for different parts of the tax system. The original intention was to survey users of the tax system to ask how satisfied they were with different taxes or areas of the tax system. However, most people are unlikely to feel satisfaction after paying tax, or at least not in the traditional sense. And the outcome might well depend on other factors such as the rate of tax or the user’s ability to pay it.

The OTS settled upon seven factors of tax complexity for the first iteration of the model. The first, legislative complexity, was further sub-divided into 5 sub-categories. Apart from the obvious factor of length of legislation, the OTS also picked the number of reliefs in each tax area (as special cases add to complexity) and the number of Finance Acts since 2000 with changes to the tax area (intended to be a rough measure of the frequency of change, another key factor of complexity). The final list of factors used was:

- **Effectiveness**

- Legislative complexity, consisting of:
  - The number of sections and paragraphs in a tax measure's legislation
  - The number of pages in Tolley's 2011-12 tax manual<sup>7</sup>
  - The number of reliefs, as found in the OTS reliefs review
  - The number of Finance Acts with changes (since 2000)
  - The legislation's Gunning-Fog readability index score<sup>8</sup>
- HMRC guidance complexity
- Number of taxpayers impacted by the legislation
- Average ability of taxpayers involved in the area
- Avoidance risk
- **Resource Efficiency**
  - Cost of compliance
  - HMRC operating costs

Each of the seven factors was given a score out of five with 1 being simple and 5 complex. For most of the factors there was little hard data available so the 1-5 scores were necessarily subjective judgments.

The weightings used for each factor were set to give roughly equal weights to each of the two broad categories of usability.

The seven factors were then multiplied by their weightings and divided by a scaling factor (150) to give a score out of ten for the tax area.

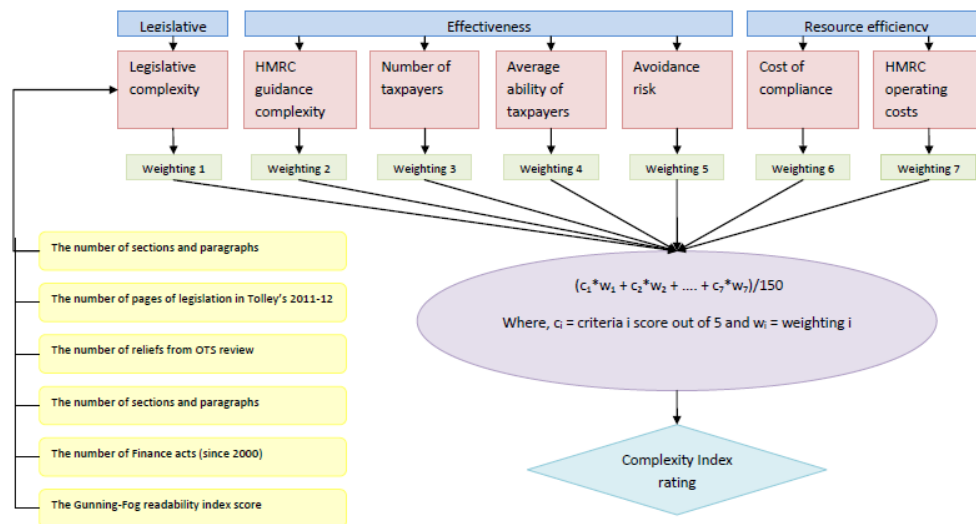


Fig 2: the first iteration of the OTS model of tax complexity

The OTS then constructed a detailed spreadsheet with the 11 factors in columns. The tax system was then divided into 111 discrete areas, which were set out in rows. This

<sup>7</sup> This exercise was completed before later versions of Tolley's handbook were made available

<sup>8</sup> This is a weighted average of a number of words per sentence, and the number of long words per sentence

was done on the basis that each separate area was clearly defined and might be suitable for an OTS simplification review. Smaller taxes such as air passenger duty or aggregates levy were taken as one sub-division, whereas the major taxes - income tax and corporation tax - were sub-divided into around 20 and 60 self-contained areas respectively, roughly corresponding to Parts of legislation.

Filling out the index was done by two tax experts, one from HMRC and one from the private sector based on their wide experience and knowledge. The individual scores were discussed and a single figure agreed on. The completed index was then discussed with three separate groups of HMRC frontline staff from different work areas to check the scores reflected their experience. The responses were largely positive and the scores tended to align with people's expectations of which areas of the tax system were most complex.

A workshop was held in July 2012 with a group of around a dozen tax experts drawn from practice, academia and the civil service. The attendees expressed some concerns about the methodology, including the subjectivity of some of the 'scoring', the overlap of some of the criteria and the way the index sought to get to a precise score when a more rounded level would be better. The concept, though, was endorsed and the OTS was encouraged to develop the index further.

Significant feedback was received after the OTS published the model in December 2012, most notably from Ulph (2012). This feedback led the OTS to draw up a second iteration of the model in 2013.

### **The Second Iteration**

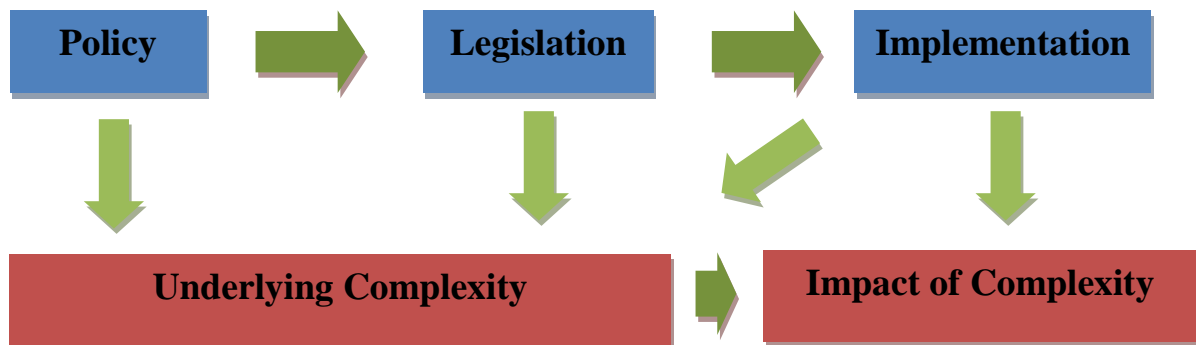
The key aim of the second version was to reduce the double counting present in the first. For instance, the number of sections and paragraphs is partly determined by the number of pages of legislation. It was also felt that the OTS needed to be clearer about what exactly it was measuring. There needed to be a clearer split between the intrinsic measures of complexity, such as legislative complexity, and the outcomes of that complexity, such as costs of compliance. A strong criticism of the original model was that it was wrong to combine these two categories into one number. First, this was combining completely different things; and second combining the factors into one number resulted in a loss of valuable information.

To account for this, the original single complexity score was split up into two separate scores:

- **Underlying Complexity** indicates the level of intrinsic complexity found in the structure of the tax- this consists in the policy design and legislation. This includes the rate of change in tax law and the length of legislation
- **Impact of Complexity** indicates a combination of both the cost of compliance to an individual taxpayer and the aggregated cost of compliance for all taxpayers. This is distinct from underlying complexity due to the role played by policy implementation. Although underlying complexity can also have an

effect on the impact of complexity (i.e. by structuring a tax measure in a way that applies to more taxpayers).

The OTS also decided to map the model more closely onto the familiar elements of the policy making process: complexity in policy and legislation increases the underlying complexity figure. Policy and legislation and implementation affect the impact of complexity and the underlying complexity figures. A similar model has been suggested by Tran-Nam<sup>9</sup> in his work on defining complexity. The key distinction between the OTS model and Tran-Nam's is an aggregation of policy and legislative complexity, and the separation of complexity into two figures to divorce underlying complexity from the impact.



*Fig. 3: the complexity model*

The OTS methodology now uses 10 factors of complexity:

- 6 to measure the underlying complexity
- 4 to measure the impact of complexity

One measure has been removed as it is duplicated (number of sections and paragraphs) and two more increased. The costs of operation of HMRC and taxpayers have been aggregated into one measure; and the measure of reliefs now also includes the number of exemptions. A new measure has also been added: the complexity of information required to make a return.

A potential disadvantage of having two scores is that this slightly affects the usability of the model as some people would prefer a single complexity figure rather than two.

### **Underlying complexity**

The methodology used attempts to measure factors contributing towards underlying complexity in the tax system by reviewing how policy, legislative and operational complexity separately contribute towards it. Other factors could be chosen but the

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<sup>9</sup> Tran-Nam, Evans (2013)



OTS has tried to select the most important, based on its experience of carrying out simplification reviews.

### *Policy complexity*

1. ***Numbers of exemptions plus the number of reliefs*** – many people have told us that much of the complexity within a tax system stems from the existence of reliefs and special cases. Increasing the number of exemptions increases the complexity in calculating whether or not a taxpayer is exempt from tax. The reduction in the number of taxpayers affected is reflected in a different measure under the impact of complexity. The numbers are taken from the OTS list of tax reliefs, updated to include legislation up to Finance Act 2013.
2. ***The number of Finance Acts with changes to the area (since 2000)*** – This criterion is retained from the first iteration because change is a significant contributor to complexity. It is more appropriate to include this as policy complexity rather than legislative, as much of the change in the Finance Acts is because of changes in policy.

Evans (2013) has suggested that the simple number of Finance Acts was not necessarily a suitable measure of the complexity of change, as it fails to take into account the quality of change e.g. Real Time Information represents a significant behaviour change on behalf of employers yet the legislation was implemented in one Finance Act. However it is a relatively simple measure and is often raised as an important factor of complexity by tax advisers and businesses.

There is no particular reason to choose the year 2000 as the base level: clearly the volume of change could be assessed over a shorter or longer period. The OTS's view is that a reasonably long period – more than 10 years – is required but as the index develops it will be necessary to standardise on an elapsed period so this becomes a 'rolling' measure. It is effectively 12 years at present and that may well be appropriate: probably the maximum that a business may have to consider in terms of open tax issues, but more significantly an appropriate period of knowledge for a tax professional to have to 'carry'.

### *Legislative complexity*

3. ***The Gunning-Fog readability index*** – This is retained from the first iteration because it gives a comparative indication of how easy the text itself is to read. Other measures are available, but generally involve similar calculations and for these purposes the main requirement is consistent appraisal across legislation.

4. ***Number of pages of legislation***<sup>10</sup> – This measure gives an objective indication of how long the legislation is. This measure is entirely separate from the policy complexity: a complex policy can be expressed in simple, short legislation, and a simple policy in longer legislation. The length of legislation can contribute towards an impression of complexity, but it can also make legislation easier to understand<sup>11</sup>.

### *Operational complexity*

5. ***Readability and availability of HMRC guidance*** –The HMRC guidance is often the first, and sometimes only, place taxpayers will look when trying to meet their obligations. Most taxpayers will never look at legislation, especially those who appoint agents. Therefore how easy it is to use affects how simple the tax system is to operate. Here ‘guidance’ covers not only the HMRC manuals but also help sheets and guides to completing HMRC forms. The value assigned to this factor is a 1-5 figure.
6. ***Complexity of information requirement to make a return*** – this is a new criterion which captures the difficulty in gathering and updating the information required for the taxpayer to meet their obligation. The process is significantly less complex if little or no information is required compared to a situation where a significant amount of different information, some of which may not be easily accessible, is needed. Whilst the amount of information required is clearly a factor, other factors must be taken into account, as some information is easier to provide and record than others, and may already be collected for non-tax purposes. The value assigned to this factor is a 1-5 figure.

The first four of the criteria are measured in absolute terms. The final two, for operational complexity, are measured on a subjective one to five scale, with ‘five’ representing the highest complexity and ‘one’ the lowest.

### **Impact of Complexity**

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<sup>10</sup> Ideally number of words should be used, as pages can be set out differently, different font sizes may be used or large footnotes can distort the true number of pages. However, it may be impractical to count the number of words unless a computer is involved.

<sup>11</sup> Length of legislation is not necessarily a measure of complexity: we would acknowledge that the reverse can also be true, ie that longer legislation can solve complexity by allowing full and careful setting out of the issues involved. For the present we have retained length as a measure of complexity partly because it is a simple and objective measure but mainly because most people do seem to view length as an indicator of complexity.

#### *Average resource cost*

1. ***Net average cost per taxpayer, incurred by taxpayers and HMRC*** – This measure looks across both sides of the system i.e. taxpayers and HMRC. By including both sides of the equation, shifts in resource costs between the two sides can be captured. Note that ideally resources spent on avoidance would be included in this measure, although this information is not readily available. At the moment, the value assigned to this factor is a 1-5 figure but numerical data for some areas of tax is available.

#### *Aggregate impact*

2. ***Number of taxpayers*** – It seems relatively uncontroversial that the complexity of a tax will have a greater total impact if more people are affected by it. The value assigned to this factor is a 1-5 figure based on the number of taxpayers.
3. ***Average ability of taxpayers*** – This factor allows the question “does it matter if it’s complex?” to be answered. If complexity affects sophisticated taxpayers only, then it may be of less concern than if the main impact is on the average small business owner or pensioner. The value assigned to this factor is a subjective 1-5 figure.
4. ***Avoidance risk*** – This is a measure of the amount of tax at risk from avoidance because of the behaviour of a minority of taxpayers. There is a link between complexity and avoidance, and tax avoidance can generate complexity because it creates a need for detailed anti-avoidance rules, which themselves can create new opportunities for avoidance. At the moment, the value assigned to this factor is a subjective 1-5, although HMRC may have estimates of the tax at risk from avoidance in some areas of the tax system.

### **Aggregating the Criteria**

To aggregate the individual factors into the two complexity scores a weighting is applied to each criteria, much like in the original methodology:

$$(c1*w1 + c2*w2 + \dots + c6*w6)/50 = \text{index rating}$$

Where,  $c^x$  = criteria or score out of 5,  $w^x$  = weighting to give a range of scores between 0 and 10<sup>12</sup>.

This gives a simple overall impression of relative complexity, but also allows analysis of the individual criteria scores to understand why an area is complex and who it is

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<sup>12</sup> The number ‘50’ was chosen as a scaling factor to give scores roughly between 0 and 10

affecting most. The weightings have been designed so that each measure in the index contributes roughly equally to the final complexity score.

Further amendments to the weighting system are currently being explored. For example, it is planned to ask more tax experts to fill in the index independently and then come together to discuss the outcomes and adjust the weightings to better align the outcomes with the experience of tax experts.

Evans (2012) has suggested that a Delphi methodology<sup>13</sup> be applied to the weightings - that they be presented to a number of tax specialists and experts, who will then be able to provide their views.

**Example: Aggregates Levy, Air Passenger Duty, Bank Payroll Tax**

The table below shows example scores for the aggregates levy, air passenger duty and bank payroll tax based on the second iteration of the index. These have been scored by OTS team members who are not specialists in these areas to illustrate the methodology; the figures are purely illustrative of the kind of results the methodology tends to produce:

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<sup>13</sup> Evans, C., & Collier, K. (2012). OTS method corresponds to a form of Delphi advocated here.

Area of Tax	Weighting applied in Total Measure <sup>14</sup>	Aggregates Levy	Air Passenger Duty	Bank Payroll Tax
<b>Factors contributing to underlying complexity (numbers and scale)</b>				
Number of exemptions + number of reliefs	4	27	10	2
Number of Finance acts with Changes (since 2000)	14	7	7	0
Readability Index	6	11.78	11.67	16.42
Number of Pages of legislation	1	62	15	16.5
Guidance Complexity	20	2	3	1
Complexity of information required to make a return	20	3	1	4
<b>Total Underlying Complexity<sup>15</sup></b>		5.5	3.8	2.0

<b>Factors contributing to impact of complexity (numbers and scale)</b>				
Net average cost to taxpayers and HMRC	25	4	1	2
Number of taxpayers affected	25	1	1	1
Average ability of taxpayers	25	2	4	1
Avoidance Risk	25	1	1	1
<b>Total Impact of Complexity<sup>16</sup></b>		4.0	3.5	2.5

*Fig. 1 Complexity factors for aggregates levy, air passenger duty and bank payroll tax*

Similar conclusions for this example can be drawn compared with the first iteration. The underlying complexity measure would normally score between 1 (low) and 10 (high) so a score of 3.8 can be regarded as low complexity and 5.5 as of middling complexity. Aggregates levy displays a significantly higher level of underlying complexity, due to the much larger number of exemptions and reliefs, combined with the larger number of pages of legislation. This accords with the view of some tax specialists the OTS has spoken to with experience in this area.

Air passenger duty has a level of intrinsic complexity in between the other two taxes, combined with a lower level of impact. The second iteration is therefore broadly consistent with the original version, but the methodology is more robust and offers extra information. It is also noticeable that the bank payroll tax scores relatively low despite such factors as its readability and return information, thanks to its stability, paucity of exemptions and reliefs, and the high ability of taxpayers who are impacted.

### **Necessary complexity and unnecessary complexity**

When the underlying complexity and impact of complexity have been calculated, it will be possible to know whether a tax is relatively complex or not, and why.

<sup>14</sup> These weightings have been chosen to give specified weight to each measure.

<sup>15</sup> This was calculated using the following formula:  $(4*x) + (14*y) \dots /50$

<sup>16</sup> This was calculated using the following formula:  $(25*x) + (25*y) \dots /50$

However, this is not enough to inform the OTS's work, as often complexity in a tax measure can be because of real-world commercial complexity, which cannot be simplified.

Some taxes may in fact be necessarily complex. This could be because they seek to tax complex financial transactions or commercial structures. This means that simplification of the tax is not possible without either:

- Changing the policy objective<sup>17</sup>
- Finding a way to simplify the business situation or transaction<sup>18</sup>
- Creating avoidance or non-compliance where additional complexity could have prevented it

Since the objective of the index is to provide the OTS with a measure to identify areas of tax which are appropriate for simplification, being able to capture which taxes are necessarily complex and which are not would be helpful.

Professor Ulph suggested that this could be done through a comparison of underlying complexity and impact of complexity in relation to the measure of the complexity of the policy objectives involved. This has not been analysed in depth here as it would require an entirely different index to measure policy objective complexity, which is outside the remit of this paper. However, it is certainly something to consider as the index is further developed

## **Scenarios**

The OTS's aim in developing a complexity index is to get to an agreed model. However, one advantage of the OTS model is flexibility- the weightings enable the model to be tailored to varying sets of circumstances. For example, the index could potentially be used by ministers to inform them on areas of complexity in the tax system. There are political elements a minister may be concerned with that matter less from a neutral standpoint. Any modification of the standard methodology would of course have to be disclosed in any use of the index, though we suspect that such modifications would be for private use.

The ideal way to take different priorities into account would be to adjust the weightings based on the preferences of the individual using it. The impact of adjusting the weightings has been demonstrated below, to show how sensitive the index is when making changes.

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<sup>17</sup> As an example, the OTS did suggest an alternative way of taxing the smallest business, perhaps taxing on the basis of a percentage of turnover, as a route to a simpler system that might be worth exploring.

<sup>18</sup> Changes in accounting rules may well mean that the tax treatment can follow more simply.

Area of Tax	Weighting applied in Total Measure	Capital gains tax Individuals – Computation Rules	Income Tax Reliefs	Inheritance Tax	Type of Number
<b>Underlying Complexity</b>					
Number of exemptions + number of reliefs	1	51	7	89	Integer
Number of Finance acts with Changes (since 2000)	10	12	12	13	Integer
Readability Index	3	27.69	16.76	11.72	Index number
Number of Pages of legislation	1	79.5	23	198.75	Number
Guidance Complexity	20	5	3	5	Rating 1 to 5
Complexity of information required to make a return	20	3	2	5	Rating 1 to 5
<b>Total Underlying Complexity</b>		9.9	6.0	13.1 <sup>19</sup>	Index number 1 to 10
<b>Impact of complexity</b>					
Net average cost to taxpayers and HMRC	25	3	3	5	Rating 1 to 5
Number of taxpayers affected	25	3	5	2	Rating 1 to 5
Average ability of taxpayers	25	5	5	3	Rating 1 to 5
Avoidance Risk	25	3	3	5	Rating 1 to 5
<b>Total Impact of Complexity</b>		7.0	8.0	7.5	Index number 1 to 10

The complexity figures for these three tax measures is easily explained: capital gains tax and inheritance tax have high levels of underlying complexity, partly due to the large amounts of change these policies have undergone since 2000. They also have very complex guidance. Inheritance tax has a very large number of pages of legislation dedicated to it. They both express a high impact of complexity, albeit for different reasons; Inheritance tax is very costly to administer and subject to avoidance risk, though does not affect a high number of taxpayers, while capital gains tax for individuals affects the general public who are likely to have a low average ability to understand the tax.

Income tax reliefs<sup>20</sup> (mainly the personal allowance, married couples allowance and relief for interest and royalties) expresses a low level of underlying complexity, as there are very few exemptions or reliefs available and the number of pages of legislation is low. However, the impact of complexity is high, as it affects a very large number of taxpayers with a low average ability to understand tax.

A minister using the complexity index may choose to adjust the weightings to take into account their own political goals. Below the weightings have been adjusted to accommodate three changes a minister may wish to take into account when making decisions based upon complexity: the complexity of information required to make a

<sup>19</sup> Underlying complexity greater than 10 is possible where pages of legislation is very high

<sup>20</sup> the corresponding legislation is ITA 2007, part 3 and part 8 (chapters 1 and 4)

return, the total cost to the taxpayer and HMRC, and the avoidance risk (which is particularly relevant in the current political climate).

For this exercise the adjusted weightings for this exercise were calculated by first adding up the current weightings. The weighting which was chosen to be emphasised was then increased. The other weightings were kept the same and the figure by which the total is divided to arrive at the complexity rating is increased appropriately. The final aggregated weighting figure should then be equal to the initial aggregated weighting figure:

Area of Tax	Adjusted Weighting	CGT Individuals – Computation Rules	Income Tax Reliefs	Inheritance Tax
<b>Underlying Complexity</b>				
Number of exemptions + number of reliefs	1	51	7	89
Number of Finance acts with Changes (since 2000)	10	12	12	13
Readability Index	3	27.69	16.76	11.72
Number of Pages of legislation	1	79.5	23	198.75
Guidance Complexity	20	5	3	5
Complexity of information required to make a return	40	3	2	5
New divisor required to calculate final figure		68.18		
<b>Total Underlying Complexity</b>		8.1	4.9	11.0

*Fig. 1 Complexity of information required to make a return adjusted weightings*

A little sensitivity to this factor can be seen. Previously the ratio between the weightings was roughly 1.65:1:2.18. The ratio has now changed to 1.65:1:2.24 – overall inheritance tax is proportionately more complex when compared on this scale. This isn't surprising, as the other two factors do not score particularly highly on the 'complexity of information' factor.

Area of Tax	Weighting applied in Total Measure	CGT Individuals – Computation Rules	Income Tax Reliefs	Inheritance Tax
Net average cost to taxpayers and HMRC	50	3	3	5
Number of taxpayers affected	25	3	5	2
Average ability of taxpayers	25	5	5	3
Avoidance Risk	25	3	3	5
New divisor required to calculate final figure		62.5		
<b>Total Impact of Complexity</b>		6.8	7.6	8.0

*Fig. 2 Cost to taxpayers and HMRC adjusted weightings*

Here a doubled weighting has been applied to the net average cost to taxpayers and HMRC.



The results are immediately obvious- inheritance tax is now considered to have the more impact than income tax reliefs previously did. The previous ratio was 1:1.14:1.07, and has now changed to 1:12:1.17

Area of Tax	Weighting applied in Total Measure	CGT Individuals – Computation Rules	Income Tax Reliefs	Inheritance Tax
Net average cost to taxpayers and HMRC	25	3	3	5
Number of taxpayers affected	25	3	5	2
Average ability of taxpayers	25	5	5	3
Avoidance Risk	75	3	3	5
New divisor required to calculate final figure	75			
<b>Total Impact of Complexity</b>		6.7	7.3	8.3

Fig.3 Avoidance Risk adjusted weightings

If a user of the index’s overriding concerns basing the impact of complexity around one factor, a particularly strong weighting could be applied to that factor. This has been demonstrated here with avoidance risk. This can create a substantial shift in impact of complexity figures. Inheritance tax again is measured as more complex using these weightings.

## Next Steps

The aim is to develop the index further, to achieve the best choice of complexity factors and weightings, and a robust scoring methodology. The OTS intends to finalise a workable model by the end of 2014.

A separate idea the OTS intends to explore is to draw up a complexity index based on different types of taxpayer rather than different areas of tax. For example, is the tax system more complex for a small business than for a large business, or for an employee compared with a pensioner? This would involve identifying the different areas of tax each type of taxpayer has to interact with, and then using the current OTS complexity index to construct a complexity measure (or measures) for each type of taxpayer.

The OTS is seeking comment on these suggestions. If you are interested in providing a suggestion, you can contact the OTS at [ots@ots.gsi.gov.uk](mailto:ots@ots.gsi.gov.uk).

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