Office of Tax Simplification

The Office of Tax Simplification Complexity Index

Background

In addition to reviews into specific areas of taxation, the Office of Tax Simplification (OTS) is also analysing the underlying problem of complexity in the tax system as a whole. There are a number of factors that are considered to give rise to complexity and in his seminal Hardman lecture in 1999, Adam Broke (a member of the OTS Board) pointed to the length of tax legislation, the language used, the drafting style and the diversity of taxes as all contributing to the complexity of the UK tax code[1]. To this list could also be added political pressures and policy initiatives, both of which have an impact on tax legislation.

To date the only specific factor that has been considered in detail is the length of legislation, which has led to the oft-quoted statistic that the UK has the longest tax code in the world. The conclusion of the OTS is that, whilst it is a factor in complexity, lengthy legislation does not necessarily mean complex legislation. Indeed, there is a good argument that longer legislation can (though does not always) mean clearer legislation: the point is that length gives scope to explain things in full, and also make the provisions self-contained rather than having many cross-references to other sections. Length of legislation cannot be dismissed as a factor contributing to complexity – it is relevant, and certainly can pose a psychological barrier. An OTS paper on length of legislation can be found on our website[2].

This paper sets out a methodology for measuring complexity on a wider scale than just its length. Here we describe seven key factors of complexity, how to score tax legislation against the factors and then how to bring these scores together into a complexity 'index'. This index can be used to rank, relatively, all tax legislation by level of complexity. It has

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[1] Adam Broke, The 1999 ICAEW Tax Faculty Hardman Lecture "Simplification of tax, or I wouldn't start from here"
[2] http://www.hm-treasury.gov.uk/ots_taxcomplexityproject.htm

been a helpful tool in considering which parts of the tax system the OTS should propose to Ministers to focus on for its next reviews.
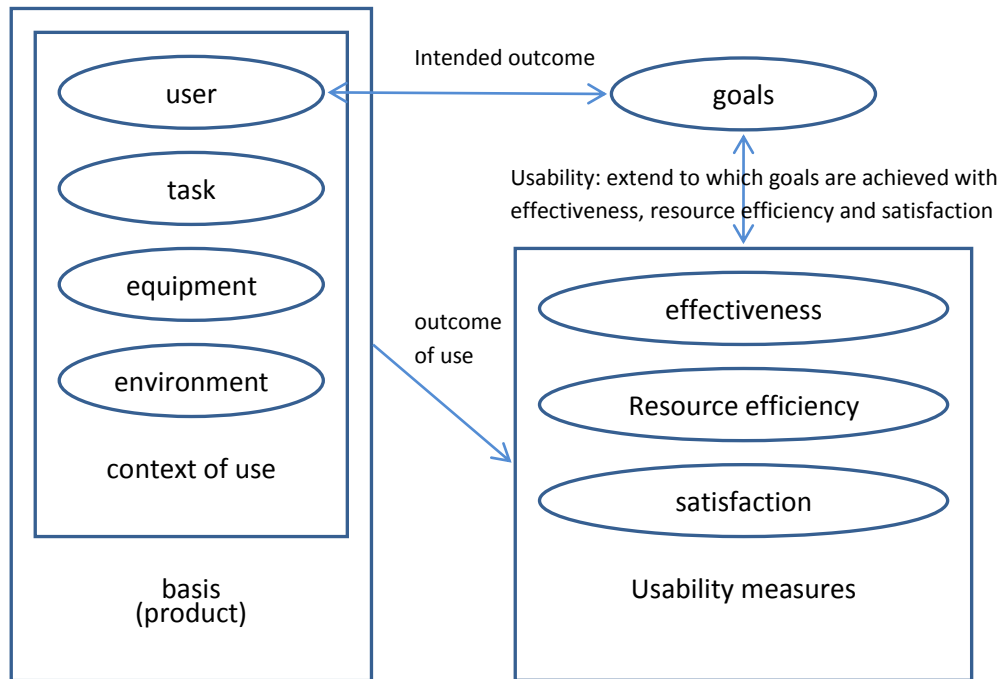
The Usability framework

In seeking a conceptual approach to address complexity which is measurable in some objective form, the OTS have drawn on the work of Professor Frank Pedersen, and wish to acknowledge his willingness to allow us to use his concepts as a starting point for our work.

Professor Pederson is a former head of the Tax Simplification Unit at the Danish Ministry of Finance and is currently a Visiting Scholar at New York University. He is working on a paper entitled *"Advancing the study of tax complexity with the usability model"*[3].

Pedersen's usability model is based on the International Standard Organisation's definition of usability as "the effectiveness, resource efficiency and satisfaction with which specified users can achieve goals in particular environments." Applying this to tax, it is necessary to first identify the intended outcome for different categories of user (the context), and then the "usability" is the extent to which the goals are achieved with effectiveness, resource-efficiency and satisfaction (see Fig 1):

Figure 1: ISO definition of usability

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[3] September 2011

user

Intended outcome

goals

task

Usability: extend to which goals are achieved with effectiveness, resource efficiency and satisfaction

equipment

outcome
of use

effectiveness

environment

Resource efficiency

context of use

satisfaction

basis
(product)

Usability measures

As an illustration, a simple relief aimed at the ordinary taxpayer can be rendered complex by its being expressed in language that includes extensive definitions which are inaccessible to such taxpayers, or if it requires complex procedures to claim it.

Initial steps

In December 2011, the OTS Board asked the OTS team to test the model by applying it to the tax legislation for leasing. The legislation was first analysed to understand its application and its historical development, from the point of view of both lessors and lessees. Meetings were held with HM Revenue and Custom's (HMRC) technical specialists on leasing, a group of LBS financial sector tax inspectors, and the Finance and Leasing Association (FLA), as well as with PwC's leasing experts. We are grateful to all the groups, whose views have been very helpful in progressing this paper.

When applied to leasing, it was clear that the result of applying the methodology did draw out some of the complexities experienced by different users of the legislation and was seen as useful by the groups with whom the model was discussed. Although it was felt at first that there would be little data on the experience of taxpayers using the legislation, it became apparent that the FLA had lots of experience, survey evidence and anecdotal

evidence of where the complexities lie. As in many ways might be expected, the best way to find data on usability is to ask the users themselves.

Having checked the application of the model in a specific area of tax, it was then decided to use the model as a basis for developing a complexity index across a wider area of tax. The sample selected to test this wider, desk based assessment of tax legislation was the last three rewrite acts[4] as well as aggregates levy, IR35, share schemes, and bank payroll tax. The model was then refined further based on feedback from workshops and discussions held with tax specialists, academics and HMRC staff.

The index

Once we had a proven approach to assessing complexity the model was turned into an index with the following aims:

- To provide an indication of which areas of tax legislation are considered to be particularly complex;

- To develop a tool that will, subject to ministerial approval, help to determine the future work of the OTS; and

- To provide HM Treasury and HM Revenue and Customs a methodology to be applied to future legislation.

The index ranks each area of tax legislation depending on its relative complexity. Scores are given out of 10, with 10 being the most complex and 0 the least. The scores are based on criteria that the OTS has determined as sources of complexity for users of tax legislation.
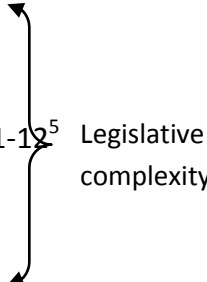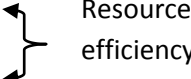
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[4] Corporation Tax Act 2009 ("CTA 2009"), Corporation Tax Act 2010 ("CTA 2010") and Taxation (International and Other Provisions) Act 2010 ("TIOPA 2010")

How the index works

A full diagram of the complexity index can be found in Annex A.

<u>The criteria</u>

We have defined seven sources of complexity, against which we judge each current piece of tax legislation. They are subsets of legislative complexity, effectiveness and resource efficiency which come from the usability model:

1. Legislative complexity – made up of:
    a. the number of sections and paragraphs
    b. the number of pages of legislation in Tolley's 2011-12[5] Legislative complexity
    c. the number of reliefs from OTS review
    d. the number of Finance acts (since 2000)
    e. the Gunning-Fog[6] readability index score
2. HMRC guidance complexity;
3. Number of taxpayers impacted by the legislation;
4. Average ability of taxpayers involved in the area; Effectiveness
5. Avoidance risk;
6. Cost of compliance; and Resource efficiency
7. HMRC operating costs.

Each of the seven criteria is assigned a score out of 5. For the different criteria each number from one to five represents a specific rating. For example for 'Number of taxpayers' we define a 1 as a tax that impacts on less than 10,000 taxpayers (e.g. the bank payroll tax); a 2 impacts on 10,000 to 100,000 taxpayers; and so on up to a score of 5, which impacts on over 10 million taxpayers (e.g. VAT and income tax). The ratings are assigned by a mixture of subjective judgment and objective measurement and are discussed further below. A full breakdown of these ratings is shown in Fig. 2:

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[5] The initial exercise was completed before the 2012-13 volumes were available.

[6] This is a weighted average of the number of words per sentence, and the number of long words per sentence. An interpretation is that the text can be understood by someone who left full-time education at a later age than the index.

Figure 2: 1-5 scores of complexity criteria

Number of taxpayers	Rating
>10 million	5
2 - 10 million	4
100,000 - 2 million	3
10,000 - 100,000	2
< 10,000	1
HMRC guidance (Based on length of guidance, ease of navigation, other guidance (e.g. OECD), frequency of change)	**Rating**
Complex	5
	4
Medium	3
	2
Straightforward	1
Average ability of taxpayers	**Rating**
Individuals/ unrepresentative businesses	5
Small businesses/ represented	4
Medium sized businesses	3
FTSE 250 - FTSE 100	2
FTSE 100/ HNWI/ MNCs/ specialised businesses	1
Avoidance risk	**Rating**
>£500 million	5
£250 million - £500 million	4
£100 million - £250 million	3
£10 million - £100 million	2
< £10 million	1
Cost to taxpayers/ HMRC operating costs	**Rating**
High	5
	4
Medium	3
	2
Low	1

<u>Legislative complexity</u>

Whist six of the seven criteria are simply scored out of 5 the seventh, legislative complexity, is constructed slightly differently. It is still scored out of 5, but to get to this score we weight the objective data – such as the number of pages of legislation – and divide by 100 to get a score out 10. We then rank these scores across all of the tax legislation and each quintile

represents the numbers from 1 to 5 i.e. the bottom 20% is given a 1; the next 20% is a 2 and so on. In this way the legislative complexity score is relative across tax legislation.

Who scores the index?

Given the ratings in Fig. 2 it is hopefully clear that certain elements of the OTS complexity index are objective whilst others are subjective. For instance, it is fairly straightforward and objective to obtain data on legislative complexity as we have defined it, and also the number of taxpayers affected by a piece of legislation. It is also possible to agree fairly objectively a measure of the average ability of affected taxpayers. However, subjectivity arises when considering the complexity of HMRC guidance, or the cost to taxpayers and even to some extent the avoidance risk.

To help us come to a score on these subjective criteria we have canvassed opinion from a range of 'experts' , including previous OTS secondees, academics, HMRC staff, the current OTS team and a wider user panel. Our hope is that the more views we collect, the better the 'average' score will reflect 'true' complexity. We have also reviewed our methodology with HMRC economists and statisticians for their views on its validity.

The overall score

To get from the scores for each criteria to an overall score for the particular piece of tax legislation we employ a fairly straightforward weighting to each of the criteria. This works in the same way as for legislative complexity and is shown below:

$$(c_1 * w_1 + c_2 * w_2 + ... + c_7 * w_7)/150 = \text{index rating}$$

Where, c_i = criteria i score out of 5 and w_i = weighting i

This formula gives an index score out of 10 and as this is a relative score we can, according to the selected criteria, rank the tax legislation in order of complexity. The weightings for each criteria are different and can be adjusted based on the views or objectives of the user.

Fig. 3 below shows example scores for the aggregates levy and bank payroll tax – these have been scored by OTS team members with little experience of the areas to illustrate the

methodology. They should not be taken as official views of either the OTS of government:

Figure 3: example complexity index (note figures are rounded to nearest integer)[7]

Criteria	Aggregates Levy	Bank Payroll Tax
Legislative complexity rating	5	3
Sections and Schedule paragraphs	114	49
Pages of primary legislation in Tolley's 2011-12	62	17
Number of reliefs (from OTS reliefs review)	27	2
Number of Finance Acts with changes (since 2000)	7	0
Readability index	4	4
HMRC Guidance complexity	2	1
Number of taxpayers	1	1
Average ability of taxpayers	2	1
Avoidance risk	1	1
Cost of compliance in time and money, including agent fees	1	1
HMRC operating costs	1	1
Complexity Index (out of 10)	3	2

As we might expect, both the aggregates levy and bank payroll tax legislation score fairly low for complexity, with the aggregates levy slightly more complex than the bank payroll tax. The bank payroll tax is one of, if not *the*, least complex pieces of tax legislation measured by our index as it is short, has few reliefs, covers a small number of very sophisticated taxpayers, is difficult to avoid and is relatively inexpensive to comply with. Whilst the aggregates levy is also targeted at a small number of taxpayers, is difficult to avoid and inexpensive to comply with, the ability of those taxpayers is slightly lower and the number of reliefs in particular is one of the highest in all tax legislation.

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[7] These scores are based on an internal exercise by the OTS

Limitations of the index

The OTS has taken a fairly pragmatic approach to generating the complexity index. Whilst it might not have the academic rigour of other methodologies, we feel that it is well designed for its purpose as a tool for stimulating debate and confirming or dissuading 'gut feeling'. Having said that, there are clearly limitations with whichever methodology is chosen and we are keen to continually refine the index either by changing/adding to the seven criteria or the underlying weightings and formulae. We therefore welcome comments on all aspects of the index.

Criteria

As already mentioned the OTS has taken a pragmatic approach to developing the complexity index. Having too many criteria would put people off using the index and equally having too few would lead to cries of over simplifying and 'what about this?' We have been through several iterations of the index, adding, refining and replacing the various criteria until we were happy that we had included most of the sources of complexity and avoided too much overlap and interaction between the criteria. However, we do welcome suggestions for alternative or extra criteria.

We were also keen to have a mix of subjective and objective measures of complexity in the index. Inherently complexity is down to the individual or group concerned – a tax specialist in a particular area may see the area as fairly straightforward because they are used to it, but a more generalist accountant might struggle with the area. By including objective measures we can come to a better overall balance of views

Weightings

This is both a drawback and an advantage in the OTS approach. It might be tempting to weight all of the seven criteria (and indeed the five that make up legislative complexity) equally to remove a layer of subjectivity from the index. However, there is clearly an argument that whilst the OTS has identified a good number of the sources of complexity, it is unlikely that they all contribute to it to the same extent. Indeed, in the OTS paper on length of legislation we argue that it is not necessarily that longer legislation is inherently more complex than its shorter counterpart – it may be that writing legislation in plain

English rather than legalese requires more words, but that makes it easier for the lay person to understand. The drawback is therefore that we may not have the right weightings, but the advantage is that HMRC and HMT could adjust the weightings to fit with the government of the time's policy preferences. These change the relative 'complexity' of different pieces of tax legislation.

Statistical validity

The index has been reviewed by both academics and internal statisticians and economists. From a pure statistical viewpoint, there is a clear interaction between some of the criteria, for instance the length of the legislation will be related to the number of paragraphs and sections. The OTS has taken the view that whilst this may influence the outcome of the complexity rankings slightly the index is not designed to be 100% accurate or scientific, but as a tool for assessing complexity. The hope is that the more people who use the index or contribute to its results, the more robust the results will be in generating an 'average' complexity ranking.

A single index figure

We recognise the simplicity of reducing complexity to a single figure out of 10. Whilst this leads to a loss of the detail behind the figure, it is still available for those who are interested in the individual scores of the seven complexity criteria. Using a single number has the advantage that it is easy to rank across the tax legislation and by adjusting the underlying weights (see above) the final index figure can emphasise a particular factor.

Conclusions

The complexity index remains very much a work in progress and we recognise that our methodology is very pragmatic. However, we think that we have the basis of a valuable tool which can be used for identifying complexity, selecting our future projects and left as a checklist for policy makers in HMRC and HM Treasury.

We welcome any comments and feedback on the methodology, in particular whether we should include other factors of complexity. Once we are content with the index methodology we will take the work forward by applying it to particular areas of the legislation and canvassing views from individuals and groups working in those fields.

Please send comments to ots@ots.gsi.gov.uk or via our blog:
http://taxsimplificationblog.wordpress.com/

Annex A: diagram of the complexity index

Area of tax legislation

Complexity Criteria

| Legislative | Effectiveness | Resource efficiency |

Legislative complexity

HMRC guidance complexity

Number of taxpayers

Average ability of taxpayers

Avoidance risk

Cost of compliance

HMRC operating costs

Weighting 1

Weighting 2

Weighting 3

Weighting 4

Weighting 5

Weighting 6

Weighting 7

The number of sections and paragraphs

The number of pages of legislation in Tolley's 2011-12

The number of reliefs from OTS review

The number of sections and paragraphs

The number of Finance acts (since 2000)

The Gunning-Fog readability index score

$$(c_1*w_1 + c_2*w_2 + ... + c_7*w_7)/150$$

Where, c_i = criteria i score out of 5 and w_i = weighting i

Complexity Index rating