The known knowns, the known unknowns and the unknown unknowns

Donald Rumsfeld famously said: “There are known knowns. These are things we know that we know. There are known unknowns. That is to say, there are things that we know we don't know. But there are also unknown unknowns. There are things we don't know we don't know”.

The current state of HMRC’s personal tax calculation routine for 2017-18 needs to be analysed to identify each of these categories. But first – a recap on 2016-17.

<u>The 2016-17 calculator</u>

HMRC’s self assessment calculation uses an Excel spreadsheet which they provide to tax return software developers and which almost all developers embed in their tax return software (presumably because (a) there is no point reinventing the wheel and (b) it ensures that returns are not rejected because of calculation differences).

HMRC publish an exclusions list that identifies taxpayer scenarios where the HMRC calculator is known to give an incorrect result. For most of these exclusions the instruction is that a paper return should be filed.

Until 2016-17 the exclusions list largely contained scenarios that would be met relatively rarely in practice (for example “Share Fishermen with Class 1 NICable earnings that reduce amount of Class 2/Class 4 due” – exclusion 46; or “Non-UK residents completing Return box INC17 which contains an element of 'disregarded income'” – exclusion 47). But as the tax calculation has become more and more complicated (eg restriction of loss reliefs, the savings rate band, the dividend tax allowance) so HMRC have struggled to maintain their Excel calculator.

The principal (although by no means only) difficulty has been the correct application of s25(2) ITA 2007 which says: “deduct the reliefs and allowances in the way which will result in the greatest reduction in the taxpayer's liability to income tax”. This is an unambiguous instruction that governs the calculation of income tax liability under 23 ITA 2007. Unfortunately, the interaction of different tax rates and allowances for non-savings income, for interest and for dividends makes the application of s25(2) less than straightforward.

From a computer programming perspective, I suppose it should be fairly simple to write code that allocates the reliefs and allowances in the optimal way using an iterative blockbuster approach. (I think that at least one software developer has done this.) However achieving the optimal allocation using Excel is not quite so simple. My own Excel tax calculator now contains ten worksheets each with a different set of algorithms to allocate the reliefs and allowances and then uses the optimal solution from those ten calculations. I am not quite sure how HMRC have tackled the same problems in their Excel calculator (although I know that they have adopted one of my own key algorithms).

What we do know is that between us HMRC and the software developers identified a number of 2016-17 taxpayer scenarios where the HMRC calculation was wrong and these were then included in the 2016-17 exclusions list. Scandalously, the final version of the 2016-17 exclusions list was published on 24 January 2018, just one week before the filing deadline.

One of the more important scenarios is in exclusion 70: “A customer’s total income is more than £43,000 with more than £5,000 dividends. The calculation uses reliefs and allowances to reduce non-savings and savings income at 20% rather than dividend income at 32.5%. Reallocating their reliefs and allowances would reduce, or prevent them having to pay, higher rate dividend tax”.

The exclusions list for 2016-17 stated against many of the exclusions "Planned fix for 17/18". So how has that gone?

<u>The 2017-18 calculator</u>

On 5 April 2018 HMRC issued the first 2017-18 exclusions list, swiftly followed by newer versions on 1 May, 11 May and most recently 20 July 2018.

Exclusion 70 – still not fixed.

New exclusions have been added, including:

> Exclusion 83 - "A customer with non-savings and savings income of £150,000+ in the additional rate band who, after deducting a large amount of relief through a loss etc., has non-savings income that is reduced to less than the Savings Starting Rate of £5,000 the calculation will incorrectly have an additional amount of relief set against the non-savings and will have additional relief set against the savings income. As a result the customer will have received additional relief they should not have had.";
>
> Exclusion 86 - "Scottish Additional Rate customers are not being allocated the full amount of the higher rate band where they have non-savings income of more than the Scottish basic rate band and savings or dividend income in the higher and additional rate bands.";
>
> Exclusion 88 - "A customer with non-savings income from pay, pension etc. will benefit from setting allowances against the savings income where this will position non-savings and/or (more importantly) savings income in the HR band rather than the BR band because the personal savings allowance will cover the income in the HR band."; and
>
> Exclusion 90 – "A customer with total income of more than £33,500 (consisting of non-savings income of less than their reliefs and allowances (usually £11,500), savings income of more than the amount of savings starting rate and savings nil rate available (£1,000 to £6,000) and dividends of more than £5,000) who after deducting reliefs and allowances, has taxable income of less than £33,500 will not have the most beneficial ordering of allowances. The £33,500 also applies to Scottish customers."

<u>Why is it important?</u>

One tax agent recently suggested to me "If HMRC want to under charge tax why would I want to waste my time getting them to correct their calcs?". He reckoned that he could just ignore the exclusions and file incorrect calculations. My reply was "Point taken – however HMRC will eventually run a correcting program to identify returns filed with the incorrect tax and will then write to taxpayers telling them of any under or overpayments. They plan to do this in September this year for the 2017 returns".

<u>Trapping the exclusions</u>

The software developers are having mixed success in writing code that accurately traps all the exclusion cases without trapping non-excluded cases (false positives).

By generating (literally) thousands of random scenarios in my own spreadsheet and comparing the tax calculated with the HMRC calculator I have reached the following broad conclusions:

1 The known knowns – ie scenarios where the HMRC calculator gets it right and we can agree it gets it right. As is to be expected, the vast majority of taxpayer scenarios are correctly calculated.

2 The known unknowns – these are the scenarios specified in the HMRC exclusions list. It is in respect of these that I reckon:

a. If non-savings income is between £11,500 and £33,000 (£31,000 for Scottish taxpayers) the HMRC calculation should be correct whatever the level of interest or dividends;
b. If there is no savings income except dividends the HMRC calculation should be correct whatever the level of dividends or non-savings income (except for Scottish additional rate taxpayers);
c. If dividends do not exceed £5,000 the HMRC calculation should be correct whatever the level of interest or non-savings income (except for Scottish additional rate taxpayers).

So if your client falls within any of the above three scenarios you can be fairly sure that the HMRC calculator is correct.

3 The unknown unknowns – these are the scenarios that are not yet specified in the exclusions list because HMRC do not yet know about them. An example of an unknown unknown that is now a known unknown is exclusion 81 which HMRC have added following my article on top slicing relief last September.

However there are two further unknown unknowns that I am currently in the process of persuading HMRC to accept.

<u>Treatment of notional tax credits</u>

The HMRC calculator is programmed to allocate reliefs and allowances to minimise the tax liability *after* any notional credit on UK chargeable event gains. This is simply wrong.

S25(2) ITA 2007 directs that "At Steps 2 and 3, deduct the reliefs and allowances in the way which will result in the greatest reduction in the taxpayer's liability to income tax". The liability is the result of the Steps in s23 and this result is patently *before* the deduction of any notional tax credits etc. However the HMRC calculator is applying s25 to minimise the liability *after* such deductions. An example is Dividend income £180,000, UK chargeable event gain £50,000, allowable reliefs £57,500. The s23 calculation should be £48,917.50 not £52,187.50 albeit that the notional tax credit will then be £1,000 not £10,000. At the moment the HMRC calculator will undercharge the taxpayer by £5,730.

<u>Property finance cost restriction</u>

Perhaps a more important unknown unknown is the error that the HMRC calculator makes when processing the new property finance relief under s274AA ITTOIA 2005.

The s274AA relief is given as a deduction in Step 6 of s23 ITA 2007 and can therefore influence the allocation of reliefs and allowances as directed under s25 ITA 2007.

The s274AA relief is restricted in some cases by reference to the adjusted total income as calculated by s274AA(6). The calculation of ATI takes total income less reliefs but before personal allowances and then excludes savings income (eg interest) and dividends and then deducts personal allowances.

Suppose that a taxpayer has employment income of £10,000, dividends of £20,000 and property profits of £36,000 before finance costs of £30,000. The taxpayer also claims qualifying loan interest or sideways loss relief of £12,000.

The table below shows two alternative calculations. Column (1) shows my allocation of allowances and reliefs while column (2) shows the HMRC allocation.

2017-18	Income	(1)	(2)
Employment income	10,000	10,000	10,000
Taxable property profit	13,500	3,500	13,500
Dividends	20,000	10,000	0
	43,500	23,500	23,500
Property ATI		20,000	3,500
Tax on net income		2,375	1,125
Less: Property finance relief		1,500	0
s23 tax		£875	£1,125

In column (1) – my calculation - I have allocated £10,000 of the £11,500 personal allowance to the employment income and the remaining £1,500 plus £2,000 of loss or interest to the taxable property profit and the remaining £10,000 of the loss or interest to the dividends. This will give tax before the s274AA relief of £2,375. The column (2) allocation (HMRC's) gives tax before s274AA of £1,125.

However the s274AA(6) calculations will be:

(1) My basis

Step 1 Employment income £10,000 = £10,000

Property income £13,500 - £2,000 = £11,500

Dividends £20,000 - £10,000 = £10,000

Total: £31,500

Step 2 exclude the £10,000 dividend income leaving £21,500

Step 3 reduce by the personal allowance £11,500 leaving ATI £10.000.

(2) HMRC's basis

Step 1 Employment income £10,000 - £10,000 = £0

Property income £13,500 - £2,000 = £11,500

Dividends £20,000 - £0 = £20,000

Total: £31,5000

Step 2 exclude the £20,000 dividend income leaving £11,500

Step 3 reduce by the personal allowance £11,500 leaving ATI £0.

It seems to me that the column (1) calculation must be the correct one under s23 and that the column (2) calculation (which the HMRC calculator adopts) overcharges the taxpayer by £250. The HMRC error is to allocate the allowances and reliefs to minimise the tax before the property finance relief when clearly the legislation demands that they should minimise the s23 liability which is patently after the property finance relief.

A slightly different error in the HMRC calculator can be illustrated in a second example: a taxpayer has employment income of £1,200, dividends of £100,000 and property profits of £170,000 before finance costs of £167,000. The taxpayer claims qualifying loan interest or sideways loss relief of £20,000. The HMRC calculator correctly allocates £7,550 of the interest or loss to the dividends giving tax of £35,121.25 before s274AA relief but then calculates the ATI by deducting the full £100,000 of dividends rather than £92,450. This will result in the taxpayer being overcharged by £1,510. (NB this is a different error from that identified by HMRC in exclusion 93.)

4 The unknown knowns – these are scenarios where HMRC have included an exclusion but should not have done because the HMRC calculator is in fact correct!

Actually I have only found one of these and that is exclusion 80 – "When a customer has a chargeable event gain on a life insurance policy, they are treated as having suffered tax on the gain at the basic rate. They therefore receive relief for this tax already paid. The calculator is producing an incorrect result where a customer has an amount of notional tax that exceeds the tax chargeable on the gain and is effectively relieving tax charged on other income; Relief for the notional tax in the current calculation will be overstated and putting it right will increase the customer's liability subject to interaction if the Top Slicing Relief calculation is also incorrect (see Exclusion 81)."

In my view, this exclusion is founded on an incorrect application of s530 ITTOIA 2005 which reads:

"(1) An individual or trustees who are liable for tax on an amount under this Chapter are treated as having paid income tax at the [basic rate] on that amount.

(2) The income tax treated as paid under subsection (1) is not repayable."

HMRC give two examples. In the first the taxpayer has non-savings income of £12,500 and a chargeable event gain (one year term) of £10,000. The s23 ITA 2007 tax liability is correctly calculated as £1,200 (being £200 on the non-savings income and £1,000 on the chargeable event gain). The s530 ITTOIA 2005 notional tax credit is correctly calculated as £2,000 but HMRC state that only £1,000 of this can be used, reducing the tax liability to £200. I say that £1,200 can be used to reduce the tax liability to nil.

In the second example, the taxpayer has employment income of £12,000 (on which PAYE of £100 has been deducted) and a chargeable event gain (one year term) of £35,000. The s23 ITA 2007 tax liability is correctly calculated as £6,500 (being £100 on the employment income and £6,400 on the chargeable event gain). The s530 ITTOIA 2005 notional tax credit is correctly stated as £7,000 but HMRC say "Relief should be restricted to lower of Gain of £35,000 at basic rate = £7,000 and tax deducted £6,400. It should not result in the repayment of the tax on employment of £100. Income tax due after allowances and reliefs should be £100".

I say (and so does the HMRC calculator) that the taxpayer is entitled to a refund of £100.

The HMRC reasoning is that the s530 notional tax credit can only be used to reduce tax on the chargeable event gain, but there is nothing in the legislation to support this assertion. The issue arises because (in the first example) £4,000 of the chargeable event gain is covered by the savings rate band and £1,000 by the personal savings allowance and so tax on the chargeable event gain is only £1,000 whereas it generates a notional tax credit of £2,000. Of course s530 was drafted before the introduction of the savings rate band or the personal savings allowance and nobody has thought to amend s530 to give the restriction now suggested by HMRC.

Do HMRC know about all of these issues?

Yes they do. I had a three hour meeting on 12 July 2018 at the Benton Park View HQ of HMRC. Although much of the meeting was concerned with the calculation of top slicing relief on chargeable event gains (update coming soon!), I raised all of the issues and examples covered in this article. I was disappointed that not one of my suggestions was implemented in the 20 July version of the exclusions list.

In an online webinar on 7 August HMRC did at least concede that they were reconsidering exclusion 80 in response to agent representations. It was also confirmed that there would be no “in live update” to the 2017-18 calculator (as there was to the 2016-17 calculator last year). HMRC further confirmed that they would write to taxpayers later this year if the 2016-17 tax calculation changed (see under “Why is it important?” above. It does however seem that agents will not be sent copies of these letters …

Conclusion

The HMRC calculator cannot be relied on to give the right tax figure. Most commercial tax return software products simply clone the HMRC calculator. Run the examples in this article through your own software and compare the results. Go to **www.tinyurl.com/taxpert** if you want a copy of my calculator. It will show instantly whether your tax return software or the HMRC calculation is right or wrong.