

# Risk factors of error in the tax credits process

Findings from the 2009 Panel Study of Tax Credits and Child Benefit Customers

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**HM** Revenue and Customs Research Report Number 149



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Published by HM Revenue and Customs, August 2011 <a href="https://www.hmrc.gov.uk">www.hmrc.gov.uk</a>

#### Guide to methods used in tables and figures cited in the text

The majority of tables report on questions or variables with mutually exclusive response, for example the number of changes of circumstances reported in the last year. In these tables the percentages will generally sum to 100, however there may be some instances were percentages will not sum to exactly 100% because of rounding.

Where the question allowed multiple responses, (i.e. the respondent could chose a number of responses rather than just one) the percentages will not sum to 100.

Base The weighted count is the base presented in all tables.

- O Percentage value is greater than 0, but less than 0.5, which is rounded down.
- \* Figures are based on less than 25 cases and are not robust, therefore results not presented in this report.
- " A blank space in a table where a percent figure is expected indicates that there were no responses in the category.

Statistical significance was tested using logistic regression for complex samples. Unless stated otherwise, all the differences cited in the text or presented in the figures are statistically significant at the 0.05 level.

The information presented in this report uses data from the Panel Study that has been statistically weighted to take account of the technical issues such as sample design.

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# **Executive summary**

This report presents findings from the 2009 Panel Study of Tax Credits and Child Benefit Customers – a major research effort into the experiences of tax credits recipients. The study was carried out by the National Centre for Social Research and commissioned by HM Revenue & Customs (HMRC). The study followed up an initial group of 3,706 current and previous tax credits recipients over three years.

The focus of this report is the risk factors of introducing errors in the tax credits process. Errors in tax credits, as officially defined by HMRC, occur after the finalisation of an award at the end of the tax year. Recipients get errors in their award if they do not tell HMRC that some of the information they have given is incorrect until after the Department has finalised the award or if they do not notify HMRC of information that may affect their claim. Errors in an award can result in a possible overpayment or underpayment to the recipient and costs to HMRC. Therefore it is important that the risk factors for errors are identified so that they could be minimised.

Two types of risk factors are explored in the report:

- a) Recipients' failure to check the award notice and report incorrect details and
- b) Recipients' failure to report changes of circumstances.

The risk associated with recipients' failure to check the award notice and report incorrect details:

- The majority of tax credits recipients reported that they checked the award notice (96 per cent).
- There was a consensus among the tax credits recipients that checking the award notice was important, with only two per cent saying that it was not.
- Some groups of recipients were less likely to check their award notice. Those who
  reported difficulties with the award notice such as having trouble understanding it or
  knowing what to do when they received the notice. Recipients with lower financial
  capability and those who believed that they often needed help understanding official
  forms were also more likely to say that they had not checked the award notice.
- The majority of the recipients, who checked the award notice found no mistakes (93
  per cent) and most of those who did, reported this to HMRC (94 per cent).
- It is important to note that the findings above are based on recipients' reported behaviour. The 2009 Panel Study did not ask recipients to specify the sections on the award notice that recipients had checked or to say whether they carried out detailed cross-checking of the information or simply noted the amount of tax credits that they would receive. It is therefore not possible to confirm that recipients checked the information on their personal circumstances thoroughly.

The risk associated with recipients' failure to report changes of circumstances:

- Over one in eight (12 per cent) of recipients had experienced changes of circumstances in the 12 months before the 2009 Panel Study and had not reported at least one of the changes. The remaining 88 per cent either had not experienced any changes or had reported all the changes.
- The failure to report income changes is likely to put the largest proportion of awards at risk of error it is estimated that four per cent of awards were potentially affected by recipients' failure to report income changes.

# Introduction

Tax credits were introduced in April 2003 with the aim of reducing child poverty, providing a financial incentive to work and increasing financial support to families. Latest statistics show that over six million families benefited from tax credits in 2009-10.<sup>1</sup>

Tax credits were designed to be flexible, reflecting individual recipients' circumstances and to be responsive to any changes in those circumstances. However, the flexibilities of the system mean that recipients need to ensure that HM Revenue and Customs (HMRC) holds correct and up-to-date information about their circumstances. Recipients are at risk of introducing errors into their award if they do not do this. Errors, as officially defined by HMRC, occur after the finalisation of an award at the end of the tax year. Errors in ongoing awards can enter the tax credits system at two points:

- When recipients do not notice or report incorrect information when they check the award notice (the document that informs recipients of the types and amount of tax credits they will receive).
- If recipients do not report a change of circumstances.

Errors in an award can result in a possible overpayment or underpayment to the recipient and costs to HMRC. Therefore it is important that the risk factors for errors are identified so that they could be minimised.

This report uses information from the 2009 Panel Study of Tax Credits and Child Benefit Customers to explore the factors that may increase the risk of errors entering the tax credits system at the points above. The Panel Study was conducted by the National Centre for Social Research on behalf of HMRC. The study was a large-scale survey designed to explore recipients' experience of claiming tax credits. As well as collecting background demographic information, the study covered people's experiences of the tax credits system from initial application, reporting changes in circumstances and renewals. Full details on the research are contained in the technical reports of the study<sup>2</sup>.

The 2009 study interviewed 3,706 current and previous recipients of tax credits between October 2008 and March 2009. As some the key topics covered in this report relate to the approaches recipients used to deal with their tax credits claim in the year before the interview (in tax year 2007/8), the findings in this report are drawn from the information provided by recipients who were claiming tax credits in 2007/2008. All comparisons discussed in this and other sections of the report are statistically significant which means that the observed differences between groups are unlikely to have occurred by chance. Please refer to Appendix A for details about the analysis methods.

<sup>&</sup>lt;sup>1</sup> Child and Working Tax Credits Statistics Finalised Annual Awards 2009-10. http://www.hmrc.gov.uk/stats/personal-tax-credits/cwtc-final-awards-may11.pdf

<sup>&</sup>lt;sup>2</sup> 2009 Panel Study Technical Report. http://www.natcen.ac.uk/study/tax-credit--child-benefit-study

# **Research Findings**

#### Checking the award notice

The award notice informs recipients of the types of tax credits they will receive for the current year, how much they will receive, information that they provided to the tax credits office and how and when tax credits will be paid. Recipients receive an award notice following their first claim for tax credits. Recipients also receive an award notice after they have informed HMRC of a change of circumstances that affects their award and after they have renewed their tax credits claim each year.

Recipients are required to check the award notice and to notify HMRC within one month of receipt if any information on the notice is wrong, missing or incomplete. Recipients who do not check the award notice increase the risk of introducing errors into their claim because their award is at risk of being based on incorrect information.

This section aims to explore how recipients dealt with the award notice and the impact that had on the risk of introducing errors into their claim. The findings relate to the award notices recipients received in 2008 and cover the issues below.

- Did recipients check the award notice?
- How important did recipients think it was to check the award notice?
- When did they check the notice?
- What did recipients do when they noticed incorrect information on their notice?

#### Did recipients check the award notice?

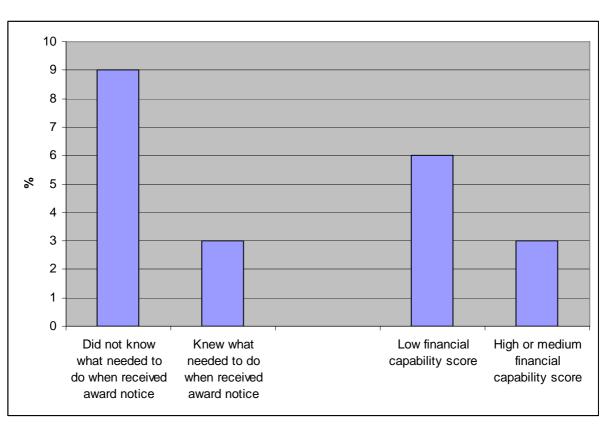
The majority of recipients (96 per cent) said that they checked or 'had a look' at the personal details listed on their award notice. The majority of recipients also thought that it was either 'very important' or 'important' to check that their personal details were correct (98 per cent). However, it is important to note that these findings are based on recipients' reported behaviour. The 2009 Panel Study did not ask recipients to specify the sections in the notice that recipients had checked or to say whether they carried out a detailed cross-checking of the information or simply noted the amount of tax credits that they would receive. It is therefore not possible to confirm that recipients checked the information on their personal circumstances thoroughly.

The proportion of those who said they checked the award notice was high in all groups of recipients. However, there were five groups who were less likely to check their award notice (Figure 1.1 and 1.2). These were therefore more likely to introduce errors into their award.

The five groups included recipients who:

- said that they did not know what to do when they received their award notice (91 per cent checked their award notice compared with 97 per cent among other recipients),
- said that there was something on the award notice that they did not understand (94 per cent checked the notice compared with 97 per cent among other recipients),
- were classified as having low financial capability<sup>3</sup> (95 per cent checked the notice compared with 97 per cent for those classified as having high financial capability),
- tended to agreed with the statement 'I often need help understanding official forms'
   (95 per cent checked the notice compared with 97 per cent who tended to disagree),
   and;
- found the award notice difficult to understand (93 per cent checked the notice compared with 98 per cent for those who said that the form was easy to understand).

Figure 1.1 Did <u>not</u> check details on award notice by characteristics of tax credits recipients



. Base: Current tax credits recipients who reported receiving the award notice in 2008/2009

<sup>&</sup>lt;sup>3</sup> Financial capability is measured on the study using financial capability scores based on more than one question in the questionnaire. The questions asked how strongly recipients agreed or disagreed with the following

in the questionnaire. The questions asked how strongly recipients agreed or disagreed with the following statements: 'I actively plan my finances', 'I try to keep myself up to date with tax issues that might affect me'; 'I am uncomfortable dealing with tax'; 'I am very confident in dealing with my finances'. Please see Appendix B for a description of how it was derived.

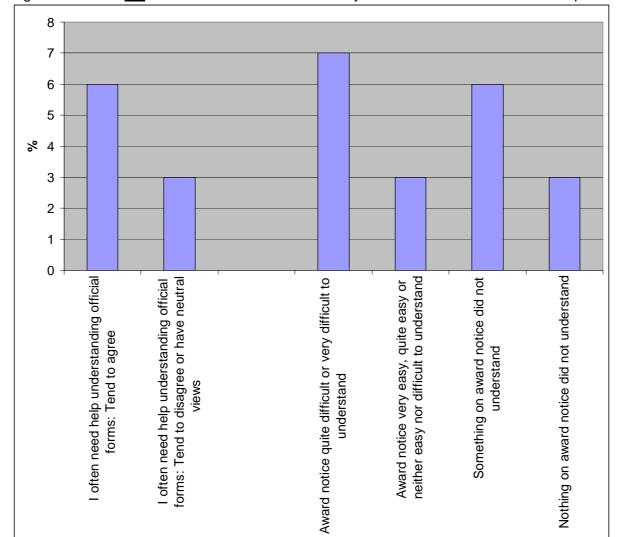


Figure 1.2 Did not check details on award notice by characteristics of tax credits recipients

Base: Current tax credits recipients who reported receiving the award notice in 2008/2009

#### When did recipients check their award notice?

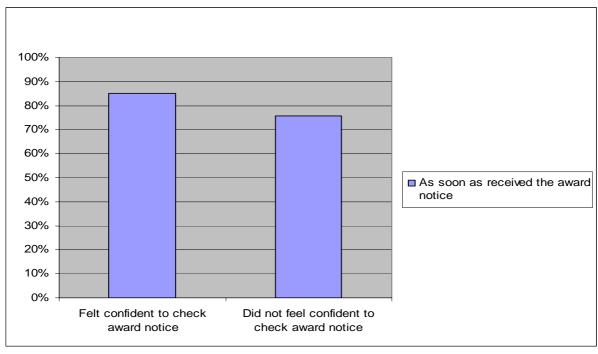
Most recipients said that they checked the personal details as soon as they received the award notice (83 per cent). However, three groups of recipients were more likely to delay checking their award notice. These groups included recipients who:

- said that they did not feel confident about checking the award notice (76 per cent checked the notice on receipt compared with 85 per cent among other recipients);
- were classified as having low financial capability (78 per cent checked the notice on receipt compared with 86 per cent among recipients classified as having high financial capability); and
- were members of Black, Asian and Minority Ethnic Groups (79 per cent checked the notice on receipt compared with 84 per cent among other recipients).

Not feeling confident about checking the award notice had the largest contribution to the likelihood of recipients delaying checking the award notice. Having a low financial capability

score had the second largest contribution and being from an ethnic minority background had the third largest contribution.<sup>4</sup>

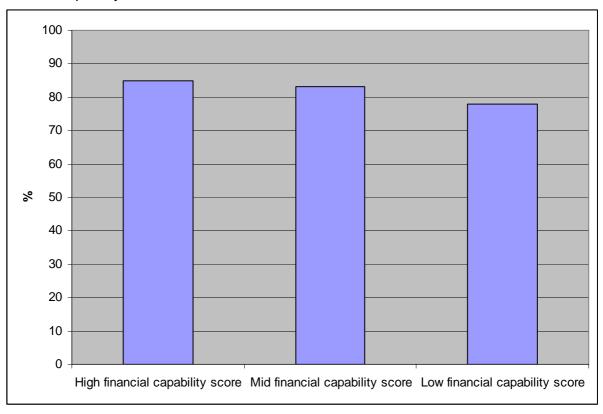
Figure 1.3 Percentage who checked details on award notice as soon as they received it by confidence in checking award notice



Base: Current tax credits recipients who reported receiving the award notice in 2008/2009

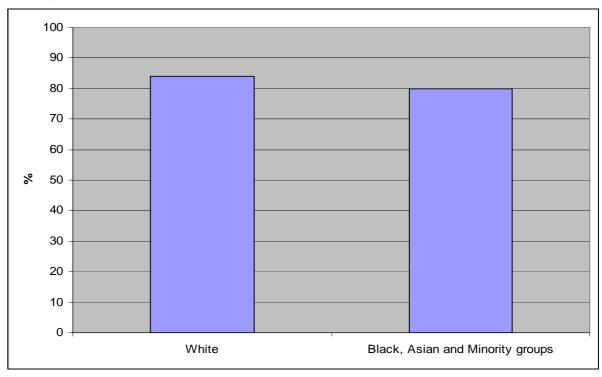
<sup>&</sup>lt;sup>4</sup> The contributions to the likelihood of recipients delaying checking the award notice were carried out by comparing the p values from logistic regression model developed to explore the time recipients took to check their award notice.

Figure 1.4 Percentage who checked details on award notice as soon as they received it by financial capability score



Base: Current tax credits recipients who reported receiving the award notice in 2008/2009.

Figure 1.5 Percentage who checked details on award notice as soon as they received it by ethnicity



Base: Current tax credits recipients who reported receiving the award notice in 2008/2009.

#### What did recipients do when they noticed incorrect, missing or incomplete details?

A small proportion of recipients (seven per cent) noticed incorrect, missing or incomplete details on their award notice. The most common inaccuracies noticed by recipients were incorrect or missing information on income, hours worked and benefit or tax credits amounts (Table 1.1). A quarter of those who noticed inaccuracies in their award notice said that they had found incorrect or missing information on income. Under a quarter (23 per cent) noticed incorrect/missing information on work hours and 15 per cent found incorrect/missing information on the amount of benefits and tax credits claimed. Other types of inaccuracies such as mistakes with details about children and childcare were less common.

Table 1.1 Types of incorrect or missing information noticed by recipients

	%
Income	25
Hours worked	23
Benefit and tax credits amounts	15
Name and address	12
Other	41
Weighted base	180

Totals sum to more than 100 per cent because some recipients found more than one type of error. Base: Current tax credits recipients who reported an error.

Nearly all those who had noticed inaccuracies (94 per cent) notified HMRC of these.

Most recipients who notified HMRC did so within two weeks (83 per cent), with a large proportion informing HMRC in less than one week (57 per cent).

#### Reporting changes of circumstances

Recipients can also introduce errors into the tax credits system by not reporting changes of circumstances or by reporting them after HMRC has finalised their award.

Recipients were asked whether they had experienced any of the changes of circumstances listed in Table 1.2 below in the twelve months before their interview.

Table 1.2 Changes of circumstances reported to HMRC

Type of change

Moved home

Respondent started living with a partner

Respondent stopped living with a partner

Respondent or partner changed job

Respondent or partner's working hours changed

Respondent or partner's income changed

Respondent or partner started working 30 or more hours per week

Respondent or partner developed a long-standing illness or disability

Respondent or partner left the United Kingdom for more than eight weeks

Respondent or partner had a baby

Childcare costs changed

A child moved out

A child left full-time education

A child over 16 continued in full time education

A child started claiming Tax Credits themselves

A child developed a long-standing illness or disability

This is not a full list of all the changes that recipients have to report to HMRC because the Panel Study did not ask about a small number of less frequent changes of circumstances.

This section assesses the extent to which recipients' failure to report changes of circumstances can introduce error to the tax credits system. It addresses the following questions:

- What percentage of recipients did not report changes of circumstances?
- Were some groups of people more likely than other recipients to introduce errors into their claim by not reporting changes of circumstances?
- Were tax credits recipients less likely to report any particular type of change?

#### What percentage of recipients did not report changes of circumstances?

Forty-three per cent of recipients did not have to report changes of circumstances because they had not experienced any changes in the twelve months before their interview. Forty-five per cent had experienced one change or more and had reported all of these changes to HMRC. The remaining 12 per cent had experienced one change or more and had not reported at least one of these changes.

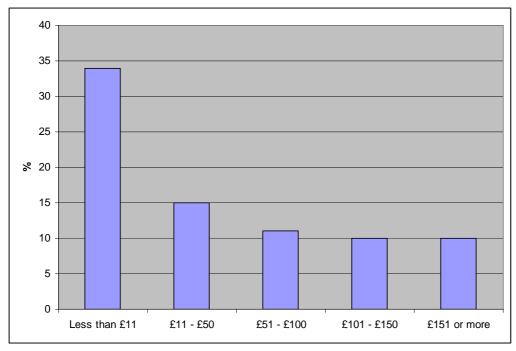
# Were some groups of people more likely than other recipients to introduce errors into their claim by not reporting changes of circumstances?

Two groups of recipients were less likely to have notified HMRC of a relevant change of circumstances and were therefore more at risk of introducing error into their claim (Figures 1.6 and 1.7).

- Recipients who received less than £11 tax credits per week this group was over three times more likely not to notify HMRC of a change compared with those who were receiving a tax credits award of £151 or more per week.
- Those who were in work this group was twice as likely not to notify HMRC of a change compared with those who were not in work.

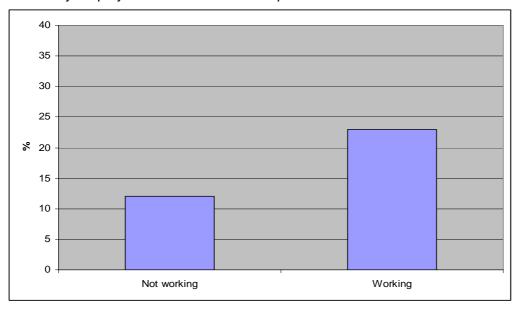
Receiving a lower weekly tax credits award had a larger contribution to the likelihood of not reporting a change of circumstances compared with being in work. <sup>5</sup>

Figure 1.6 Percentage who did not notify HMRC of at least one change in the last twelve months by weekly tax credits payment



Base: Current tax credits recipients who had a change in the past 12 months.

Figure 1.7 Percentage who did not notify HMRC of at least one change in the last twelve months by employment status of main respondent



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<sup>&</sup>lt;sup>5</sup> The contributions to the likelihood of recipients' failure to report changes of circumstances were compared using the p values from logistic regression model developed to explore the reporting of changes.

#### What changes were most likely to introduce errors into the system?

Figure 1.8 shows that tax credits recipients were most likely to have experienced changes related to income and employment. A quarter of recipients said that their income had changed in the twelve months before their interview and 16 per cent said that their working hours had changed. Ten per cent of tax credits recipients said that they or their partner changed job. Another one in ten tax credits recipients said that their child continued in full-time education, while further one in ten experienced a change in childcare costs.

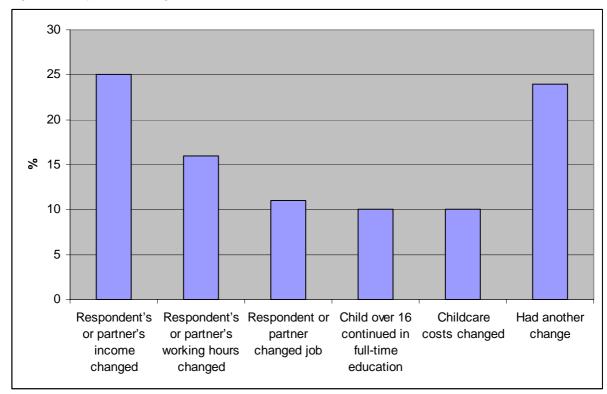


Figure 1.8 Type of changes of circumstances in last 12 months

Base: Current tax credits recipients who had change in last 12 months

Recipients were most likely not to report changes in childcare costs - almost a quarter (24 per cent) of those whose childcare costs had changed in the twelve month before the interview did not report the change to HMRC (Figure 1.9). However, some of those recipients who did not report their childcare costs may be correct in not reporting their changed in childcare costs. This is because recipients have to report changes in childcare costs of over £10 week or more lasting for at least 4 weeks. The Panel Study could not go into such details and so it asked only about changes in childcare costs in general. Recipients were less likely not to report changes in employment (17 per cent) and income (13 per cent).

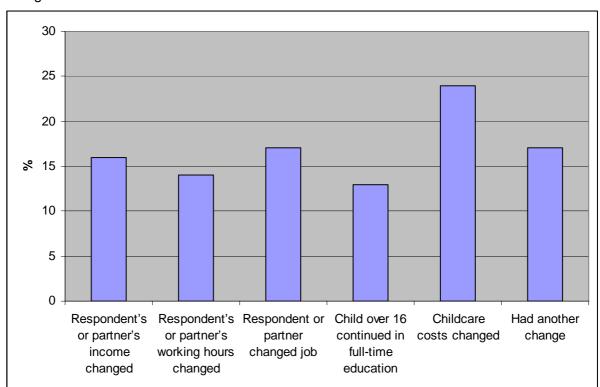


Figure 1.9 Percentage who did <u>not</u> notify HMRC of changes in last 12 months by type of change

Base: Current tax credits recipients who had a change in last 12 months.

Non-reporting of a particular change should be considered together with the overall prevalence of that change among tax credits recipients. A type of change which is experienced by a substantial proportion of recipients will introduce more errors to the system if it is not reported than a rarer change. Although recipients were less likely to report changes in childcare costs compared with income changes, the impact of the failure to report childcare costs was lower (two per cent) compared with the failure to report income changes (four per cent). This is because a smaller proportion of recipients had experienced changes in childcare costs compared with the proportion who had experienced income changes (Table 1.3). These findings indicate that taking action to encourage recipients to report income changes is likely to reduce a main source of error in the system.

Table 1.3 Tax credits awards at risk of error in last 12 months due to not reporting a change of circumstances by type of change

	Awards at risk of error	Awards not at risk of error		
	%	%	%	Weighted count
Respondent's or partner's income changed	4	96	100	3012
Respondent's or partner's working hours changed	2	98	100	3012
Respondent or partner changed job	2	98	100	3012
Child over 16 continued in full-time education	1	99	100	3012
Childcare costs changed	2	98	100	3012
Had another change	4	96	100	3012

Base: Current tax credits recipients.

Table 1.4 shows that recipients on a lower weekly tax credits award were less likely to report changes in their income compared with those on a higher award. Twenty-nine per cent of those with a weekly tax credits award of less than £11 per week said that they had not notified HMRC of their income changes and 16 per cent of recipients with a weekly tax credits award of between £11 and £50 said that they had not reported income changes. The figures for those on a higher award were lower, at between five and six per cent.

Table 1.4 Percentage who notified HMRC of change in income in last twelve months by characteristics of tax credits recipients

	Notified HMRC	Did not notify HMRC	
Level of tax credits award	%	%	Weighted count
Less than £11 per week	71	29	140
£11 -£50 per week	84	16	184
£51- £100 per week	95	5	147
£101 - £150 per week	94	6	124
£151 or more per week	95	5	86
All <sup>1</sup>	13	87	753

<sup>1</sup> Includes respondents who did not provide information about one or more respondent characteristics. Base: Current tax credits recipients who had a change in income in last 12 months.

# Conclusion

Tax credits were designed to be responsive to changes in the lives of recipients. In order for tax credits awards to reflect the circumstances of recipients accurately it is important that recipients notify HMRC of any changes of circumstances or any inaccuracies in their documentation. If they do not, recipients are at risk of introducing errors into their award and those errors may result in overpayments or underpayments to recipients and costs to HMRC.

The findings of this report which are based on recipients' reported behaviour show that tax credits recipients generally said that they checked their award notice and notified HMRC of any inaccuracies in documentation. The proportion of recipients who said that they checked their award notice and report any incorrect and missing information was high. The extent to which recipient said that they reported changes of circumstances was lower in comparison.

# References

HM Treasury (2007). Financial Capability: the Government's Long-Term Approach. URL: http://www.hm-treasury.gov.uk/d/fincap\_150107.pdf (29/04/2010).

# Appendix A Analysis method

#### **Analysis methods**

Many of the characteristics that are analysed in this report are related to each other as well as to the outcome that is considered. This means that a statistically significant relationship between two variables could in fact be affected by a third variable.

These kinds of problems can be avoided if all variables that are likely to have an effect on an outcome are controlled for together. This can be done by using statistical modelling techniques.

Results relating to time taken to check the award notice and reporting changes of circumstances were checked for joint statistical significance of all variables in the table. Results in the remaining tables were checked for statistical significance for each variable separately, because the cell sizes were too small to allow more sophisticated analysis. All of this testing was carried out using logistic regression for complex samples.

#### Respondent characteristics considered

The report discusses only subgroup differences that were statistically significant. The table below presents subgroups that were analysed for each topic but found not to be related to the outcome as well as subgroups that could not be considered, because there were too few people in some of the groups and the results would not have been reliable.

Table A.1. Respondent chara	cteristics used in the analysis	
Topic	Considered but not	Were not considered
	significant	
Whether checked the award notice	<ul> <li>Household type</li> <li>Employment status of main respondent</li> <li>Household income</li> <li>length of tax credits receipt</li> <li>IT skills</li> </ul>	<ul> <li>Income variability</li> <li>Self-employment status</li> <li>Type of tax credits received</li> <li>Literacy level</li> <li>HMRC customer segmentation group</li> <li>Ease of understanding award notice</li> <li>Ethnic group of main respondent</li> <li>At least one adult in family with limiting long standing illness</li> </ul>
When award notice was checked	<ul> <li>household type</li> <li>employment and self-employment status</li> <li>At least one adult in family with limiting long standing illness</li> <li>type of tax credits received</li> <li>length of tax credits receipt</li> <li>weekly tax credits payments</li> <li>literacy</li> <li>IT skills</li> <li>ability to understanding official forms</li> <li>HMRC customer segmentation group</li> <li>ease of understanding the award notice</li> </ul>	

knowledge of what
to do after receiving
the award notice
Anything on award
notice did not
understand
Reporting changes in • self-employment
circumstances status
length of tax credits
receipt
literacy level
ability to
understanding
official forms
HMRC customer
segmentation group
ethnic group of main
respondent
at least one adult in
family with limiting
long standing illness

# **Appendix B** Tables

Table B.1 Did not check details on award notice by characteristics of tax credits recipients (%)

			Checked award notice	Did notice		k award
					Total	Weighted
						count
Knew what to do when received award notice	Yes	%	97	3	100	2355
	No	%	91	9	100	403
Anything on award notice did not understand	Yes	%	94	6	100	447
	No	%	97	3	100	2332
Financial capability score	High score	%	97	3	100	1415
•	Medium score	%	95	5	100	480
	Low score	%	95	5	100	625
I often need help understanding official forms	Tend to disagree	%	97	3	100	1313
	Tend to have neutral views	%	96	4	100	705
	Tend to agree	%	95	5	100	722
Ease of understanding award notice	Easy	%	98	2	100	1871
	Neither easy or difficult	%	95	5	100	369
	Difficult	%	93	7	100	527
All		%	96	4	100	2789

<sup>&</sup>lt;sup>1</sup> Includes respondents who did not provide information about one or more respondent characteristics. Base: Current tax credits recipients who reported receiving the award notice in 2008/2009.

Table B.2 Time taken to check details on award notice by characteristics of tax credits recipients (%)

Tecipients (76)						
			As soon as received the award notice	Some t	ime	
			Hotico			Weighted
						count
Felt confident to check award notice	Yes	%	85	15	100	2271
	No	%	76	24	100	396
Financial capability	High score	%	86	14	100	1379
	Mid score	%	83	17	100	456
	Low score	%	78	22	100	589
Ethnic group of main respondent	White	%	84	16	100	2402
	Non-white	%	79 	21	100	269
At least one adult in family with long-standing illness or disability	Yes	%	79	21	100	489
	No	%	84	16	100	2188
Household type	Single	%	85	15	100	987
Trouberiola type	Couple	%	83	17	100	1691
Employment status of main respondent	Working	%	84	16	100	1893
Employment stated of main respondent	Not working	%	82	18	100	785
Whether main respondent or partner self- employed	No	%	84	16	100	2308
	Yes	%	80	20	100	363
Bands of weekly tax credits payments	Less than £11	%	81	19	100	606
	£11 - £50	%	83	17	100	619
	£51 - £100	%	83	17	100	550
	£101 - £150	%	86	14	100	438
	£151 or more	%	91	9	100	309
Type of tax credits received	WTC only	%	82	18	100	164
	CTC only	%	81	19	100	1590
	CTC and WTC	%	87	13	100	922
Length of tax credits receipt, 4 groups	1 year or less	%	50	50	100	292
	2-3 years	%	84	16	100	222
	4-5 years	%	82	18	100	537
	More than 5 years	%	85	15	100	1563
Literacy level, 2 groups	Can read and write	%	83	17	100	2293
	Cannot either read or write	%	84	16	100	266
I am confident using a computer	Tend to disagree	%	81	19	100	504
	Tend to have neutral views	%	84	16	100	437
	Tend to agree	%	84	16	100	1680
I often need help understanding official forms	Tend to	%	85	15	100	1277

	disagree					
	Tend to have	%	81	19	100	674
	neutral views					
	Tend to agree	%	81	19	100	682
Customer Segmentation group	Willing and able	%	85	15	100	1215
	Willing but needs help	%	80	20	100	523
	Potential rule breakers	%	84	16	100	97
	Rule breakers	%	79	21	100	47
	Unaware	%	84	16	100	764
Ease of understanding award notice	Easy	%	85	15	100	1825
	Neither easy or difficult	%	82	18	100	352
	Difficult	%	80	20	100	491
Knew what needed to do when received award notice	Yes	%	83	17	100	2292
	No	%	83	17	100	367
Anything on award notice did not understand	Yes	%	81	19	100	420
	No	%	84	16	100	2252
Total		%	83	17	100	2678

<sup>&</sup>lt;sup>1</sup> Includes respondents who did not provide information about one or more respondent characteristics. Base: Current tax credits recipients who reported receiving the award notice in 2008/2009.

Table B.3 Factors predicting time taken to check details on award notice

	Parameter	В	Std. Error	Hypothesis Te	st	
				t	df	Sig.
	(Intercept)	-0.689	0.539	-1.278	188	0.203
Felt confident to check award notice	Yes	-0.645	0.239	-2.695	188	0.008
	No					
Financial capability score	High score	-0.439	0.17	-2.588	188	0.010
	Mid score	-0.187	0.211	-0.886	188	0.377
	Low score					
Ethnic group of main respondent 2 categories	White	-0.532	0.228	-2.332	188	0.021
	Non-white					
At least one adult in family with long-standing illness or disability	Yes	0.262	0.183	1.435	188	0.153
•	No					
Household type	Single	-0.007	0.177	-0.04	188	0.968
• •	Couple					
Employment status of main respondent	Working	-0.068	0.19	-0.355	188	0.723
•	Not working					
Whether main respondent or partner self-employed	No	-0.278	0.209	-1.332	188	0.184
, , , , , , , , , , , , , , , , , , , ,	Yes					
Type of tax credits received	WTC & CTC	0.393	0.274	1.433	188	0.153
Tocolvou	CTC only WTC only	0.259	0.198	1.31	188	0.192
Bands of weekly tax	Less than £11	0.703	0.324	2.17	188	0.031

credits payments						
	£11 - £50	0.411	0.287	1.432	188	0.154
	£51 - £100	0.57	0.248	2.297	188	0.023
	£101 - £150	0.406	0.245	1.659	188	0.099
	£151 or more					
Length of tax credits receipt	1 year or less	0.086	0.19	0.452	188	0.652
·	2-3 years	-0.01	0.202	-0.05	188	0.960
	4-5 years More than 5 years	-0.17	0.197	-0.866	188	0.388
Literacy level	Can read and write Cannot either read or write	0.011	0.285	0.04	188	0.968
I am confident using a computer	Tend to disagree	-0.113	0.189	-0.596	188	0.552
	Tend to have neutral views Tend to agree	-0.149	0.193	-0.772	188	0.441
I often need help understanding official forms	Tend to disagree	-0.227	0.185	-1.228	188	0.221
	Tend to have neutral views Tend to agree	-0.104	0.184	-0.564	188	0.573
Customer Segmentation group	Willing and able	0.103	0.209	0.495	188	0.621
3	Willing but needs help	0.118	0.229	0.515	188	0.607
	Potential rule breakers	0.161	0.401	0.4	188	0.689
	Rule breakers Unaware	0.699	0.466	1.5	188	0.135
Ease of understanding award notice	Easy	-0.065	0.223	-0.29	188	0.772
	Neither easy or difficult Difficult	0.15	0.262	0.574	188	0.566
Knew what needed to do when received award notice	Yes	0.059	0.179	0.332	188	0.740
	No					
Anything on award notice did not understand	Yes	-0.233	0.25	-0.929	188	0.354
	No					

Rows with blank confidence intervals signify the reference categories.

Grey highlighting depicts the significant factors and bold text signifies the categories within factors that are significantly different to the reference category.

Table B.4 Whether notified HMRC of all changes in last twelve months by characteristics of tax credits recipients (%)

			All		east on		
			changes notified	chai	nge not	ot notified	
						Weighted count	
Bands of weekly tax credits payments	Less than £11	%	63	37	100	412	
	£11 - £50	%	82	18	100	424	
	£51 - £100	%	87	13	100	350	
	£101 - £150	%	87	13	100	287	
	£151 or more	%	88	12	100	228	
Employment status of main respondent	Working	%	77	23	100	1347	
	Not working	%	88	12	100	472	
I am confident using a computer	Tend to disagree	%	84	16	100	308	
	neutral views	%	85	15	100	290	
	Tend to agree	%	77	23	100	1195	
Knowledge about reporting changes	0-12 correct	%	75	25	100	316	
	13-14 correct	%	79	21	100	809	
	15-17 correct	%	84	16	100	670	
Ethnic group of main respondent	White	%	80	20	100	1652	
	Non-white	%	81	19	100	163	
At least one adult in family with long- standing illness or disability	Yes	%	76	24	100	317	
-	No	%	81	19	100	1502	
Household type	Single	%	87	13	100	605	
	Couple	%	76	24	100	1214	
Main respondent or partner self-employed	No	%	80	20	100	1556	
	Yes	%	76	24	100	257	
Type of tax credits received	WTC only	%	73	27	100	83	
	CTC only	%	77	23	100	1096	
	CTC and WTC	%	86	14	100	635	
Financial capability score	High score	%	83	17	100	906	
	Mid score	%	76	24	100	326	
	Low score	%	78	22	100	418	
Length of tax credits receipt	1 year or less	%	83	17	100	204	
	2-3 years	%	80	20	100	163	
	4-5 years	%	82	18	100	358	
	> 5 years	%	78	22	100	1051	
Literacy level	Can read & write	%	80	20	100	1589	
•	Cannot read or write	%	82	18	100	160	
I often need help understanding official forms	Tend to disagree	%	79	21	100	850	
	neutral views	%	82	18	100	477	
	Tend to agree	%	79	21	100	472	
Segmentation Group	Willing and able	%	76	24	100	837	
	Willing but needs help	%	81	19	100	335	
	Potential rule breakers	%	85	15	100	61	
	Rule breakers	%	70	30	100	38	
	Unaware	%	85	15	100	538	
Total		%	80	20	100	1819	

<sup>&</sup>lt;sup>1</sup> Includes respondents who did not provide information about one or more respondent characteristics. Base: Current tax credits recipients who had a change in the past 12 months.

<sup>1</sup> Base: families where at least one adult was employed.

Table B.5 Factors predicting whether notified HMRC of all changes in last

		В	Std. Error	Hypothe Test	sis	
				t	df	Sig.
Bands of weekly tax credits payments	Less than £11	0.971	0.382	2.541	188	0.012
	£11 - £50	-0.043	0.399	-0.107	188	0.915
	£51 - £100	-0.117	0.32	-0.365	188	0.715
	£101 - £150	-0.076	0.334	-0.226	188	0.821
	£151 or more					
Employment status of main respondent	Working Not working	0.595	0.246	2.418	188	0.017
I am confident using a computer	Tend to disagree	-0.298	0.264	-1.131	188	0.26
	Tend to have neutral views Tend to agree	-0.463	0.271	-1.708	188	0.089
Knowledge about reporting changes	0-12 correct	0.453	0.255	1.781	188	0.077
	13-14 correct 15-17 correct	0.433	0.188	2.3	188	0.023
Ethnic group of main respondent	White	-0.223	0.293	-0.761	188	0.448
	Non-white					
At least one adult in family with long-standing illness or disability	Yes	0.131	0.242	0.542	188	0.589
	No					
Household type	Single	-0.417	0.213	-1.96	188	0.051
	Couple					
Whether main respondent or partner self- employed	No	-0.105	0.256	-0.411	188	0.682
Turns of tour availity vacained	Yes	0.704	0.407	4.07	400	0.000
Type of tax credits received	WTC only	0.761	0.407	1.87	188	0.063
	CTC only CTC and WTC	0.281	0.255	1.103	188	0.271
Einanaial agnability saara		0.400	0.21	-2.327	188	0.021
Financial capability score	High score Mid score	<b>-0.489</b> -0.401	<b>0.21</b> 0.239	-2.327 -1.679	188	0.021
	Low score	-0.401	0.239	-1.079	100	0.095
Length of tax credits receipt	1 year or less	-0.092	0.227	-0.408	188	0.684
Length of tax credits receipt	2-3 years	0.031	0.227	0.136	188	0.892
	4-5 years	-0.021	0.231	-0.094	188	0.092
	More than 5 years	-0.021	0.221	-0.034	100	0.920
Literacy level	Can read and write	0.402	0.322	1.248	188	0.214
I often need help understanding official forms	Cannot either read					
	Tend to disagree	0.056	0.24	0.232	188	0.816
	Tend to have neutral views Tend to agree	-0.301	0.275	-1.092	188	0.276
Segmentation Group	Willing and able	0.236	0.24	0.981	188	0.328
	Willing but needs help	0.282	0.284	0.99	188	0.323
	Potential rule breakers	-0.269	0.673	-0.401	188	0.689
	Rule breakers Unaware	0.466	0.519	0.898	188	0.37

Rows with blank confidence intervals signify the reference categories.

Grey highlighting depicts the significant factors and bold text signifies the categories within factors that are significantly different to the reference category.

Table B.6 Changes of circumstances in last 12 months by type of change (%)

	Had change	Did not have		
	in last 12	change in last 12		
	months	months		
			Total	Weighted count
%	25	75	100	3012
%	16	84	100	3012
%	11	89	100	3012
%	10	90	100	3012
%	9	91	100	3012
%	6	94	100	3012
%	5	95	100	3012
%	4	96	100	3012
%	4	96	100	3012
%	3	97	100	3012
%	2	98	100	3012
%	2	98	100	3012
%	2	98	100	3012
%	0	100	100	3012
%	0	100	100	3012
	% % % % % % % % %	in last 12 months  % 25 % 16 % 11 % 10 % 9 % 66 % 5 % 4 % 4 % 2 % 2	in last 12 months change in last 12 months  % 25 75  % 16 84  % 11 89  % 9 91  % 6 94  % 5 95  % 4 96  % 4 96  % 4 96  % 2 98  % 2 98  % 2 98  % 0 100	in last 12 months  Total % 25 75 100 % 16 84 100 % 11 89 100 % 9 9 91 100 % 6 94 100 % 5 95 100 % 4 96 100 % 4 96 100 % 4 96 100 % 2 98 100 % 2 98 100 % 2 98 100 % 2 98 100 % 2 98 100 % 2 98 100

Base: Current tax credits recipients.

Table B.7 Notified HMRC of changes in last 12 months by type of change (%)

	•	<i>y y y y y y y y y y</i>				
		Did not notify HMRC	Notified HMRC			
				Total %	Weighted count	
Respondent's or partner's income changed	%	16	84	100	753	
Respondent's or partner's working hours changed	%	14	86	100	495	
Respondent or partner changed job	%	17	83	100	318	
Child over 16 continued in full-time education	%	13	87	100	298	
Childcare costs changed	%	24	76	100	287	
Had another change	%	17	87	100	724	

Base: Current tax credits recipients who had a change in last 12 months.

### **Appendix C** Derivation of variables

#### Measuring financial capability

The consultation document 'Financial Capability: the Government's Long-Term Approach' (HM Treasury, 2007) defines consumers' financial capability as 'the knowledge, skills and motivation to manage their finances'. In the study different aspects of financial capability were measured using four agree/disagree statements. These were:

- a) 'I actively plan my finances';
- b) 'I try to keep myself up to date with tax issues that might affect me';
- c) 'I am uncomfortable dealing with tax';
- d) 'I am very confident in dealing with my finances'.

An overarching variable was derived by taking the responses to these questions and using cluster analysis to identify homogeneous sub-groups. Cluster analysis is a statistical technique that involves comparing respondents on specific values and assigning them to groups based on similarity. In this analysis a type of cluster analysis called k-means clustering was used. Solutions involving three, four and five clusters were considered. Of these, the four-cluster solution was the most meaningful and was used in the analysis. The four clusters were – high financial capability scores, low financial capability scores, mid financial capability scores and high financial capability score but uncomfortable dealing with tax. For some of the tables of lower bases these categories have been merged to high financial capability and medium and low financial capability.

#### Definition of customer segmentation groups

The four fundamental dimensions of the segmentation were:

- Awareness (of one's obligations);
- Motivation (to comply with one's obligations);
- Ability (to comply with those obligations);
- Opportunity (to not comply).