

National Audit Office

HM REVENUE & CUSTOMS

Accuracy in processing Income Tax

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL | HC 605 Session 2006-2007 | 6 July 2007

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Accuracy in processing Income Tax

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SUMMARY

1 HM Revenue & Customs collected £149 billion in Income Tax in 2006-07¹, dealing with the tax affairs of around 36 million taxpayers. £125 billion was collected via employers through the Pay As You Earn (PAYE) scheme. £24 billion was collected directly from self employed people and others who have additional income, through the Income Tax Self Assessment (Self Assessment) system. The Department spends in total around £1.7 billion² a year on administering Income Tax. The cost of processing Self Assessment and PAYE tax returns and other information provided by taxpayers was £378 million in 2006-07, and involved around 15,900 full-time staff.

2 Ensuring that people pay the right amount of tax depends on them correctly declaring all their income and on the Department correctly processing the information they provide. Income Tax processing work has traditionally been carried out, alongside tax compliance work, at each of the Department's 300 offices across the UK. Since HM Revenue & Customs was set up in 2005, it has undergone significant organisational change aimed at improving taxpayer compliance and customer service and achieving efficiency savings. The Department expects progressive restructuring and streamlining of Income Tax processing work, together with increased levels of online filing of tax returns, to make a significant contribution to achieving these aims.

¹ Latest estimate for 2006-07.

² 2005-06 cost figure.

Summary text continued

3 This report examines the Department's accuracy in processing Self Assessment and PAYE. It covers:

- the levels of accuracy achieved in processing Income Tax and the impact of errors both for the Department and for the taxpayer (Part 1);
- the causes of error (Part 2);
- changes underway to improve the accuracy of Income Tax processing (Part 3).

4 My report on HM Revenue & Customs' Accounts 2005-06 examined controls over the collection of Income Tax through PAYE, including challenges faced by the Department in securing taxpayer compliance and administering the system effectively. The results of further work on controls over the collection of Income Tax through PAYE and Self Assessment will be published in my report on the 2006-07 Accounts later in July 2007. My report on "Helping Individuals understand and complete their tax forms", published in April 2007 covers how the Department provides information and deals with enquiries from individual taxpayers. Appendix A provides details of our methodology.

Conclusions

5 The Department accurately calculates the right amount of tax in 95.4 per cent of Income Tax cases. It has improved its accuracy in processing Self Assessment cases since 2001-02, achieving 96.5 per cent in 2006-07, slightly missing its target of 97 per cent. Over this period, accuracy in processing PAYE cases fell slightly although it improved to 95.1 per cent during 2006-07. The accuracy rates achieved for certain categories of cases are however lower. Around 25 per cent of PAYE cases are more complex and require processing by hand which is more prone to error, resulting in an accuracy rate of 82.1 per cent in 2006-07. There are other errors on Self Assessment that could affect the tax payable such as coding errors but the Department corrects them in an annual reconciliation exercise before they affect the tax paid. The accuracy rate for Self Assessment including these cases was 78.1 per cent in 2006-07.

6 The Department estimates its accuracy rates and the effect of errors through its quality monitoring, whereby it checks a sample of around 40,000 cases a year across all processing offices and extrapolates the results to produce a national estimate. In November 2005 it introduced monthly, rather than annual, monitoring which enables it to better track performance in real time both nationally and by area. It has also introduced in-flight checks on cases as they are processed to gauge quality, rectify any mistakes identified immediately and help staff learn and improve.

7 The Department estimates that inaccurate processing led to 3.6 million errors on Self Assessment and 2.8 million errors on PAYE in 2006-07. Some other errors result in mistakes in taxpayers' records, such as incorrectly logging address or personal details, which do not directly affect the tax payable. However if they remain uncorrected they could in time affect the tax payable. Coding errors in Self Assessment also do not affect the tax payable as the Department conducts an exercise each year to correct them. The Department also corrects other errors it can identify and those which taxpayers bring to its attention. Taking into account these changes, processing errors affected the tax payable of just over one million taxpayers in 2006-07, resulting in £125 million in underpayments of tax and £157 million in overpayments.

8 Errors in processing have a wider impact for the Department and taxpayers. The Department does not assess the likely costs involved in reworking of cases to correct errors, but this and dealing with customers affected by errors add to the pressure on staff. For the taxpayer, the average underpayment and overpayment of tax is around £250 and £290 respectively, although some errors can involve unexpected repayments of much larger sums. Processing errors are more likely to affect certain groups of taxpayers whose income tax affairs are more complicated, such as people on pensions, agency workers, those with several jobs or sources of income and those who receive benefits in kind. It is difficult to determine the additional cost to the taxpayer of getting an error corrected but the National Audit Office's tax agents' survey and taxpayer case examples show that the process can sometimes cause anxiety and require significant time and effort.

9 Wider demographic changes have increased the complexity of processing Income Tax, for example by increasing the caseload involving pensioners, and the volume of changes required to PAYE records as people change jobs more frequently. The most frequent type of error is in the Department's calculation of tax codes, which are used by employers to calculate deductions of income tax from employees' pay. In 2006-07 63 per cent of all errors in PAYE affecting the tax payable related to tax codes. The Department's projects to automate further the clerical checks and calculations involved in coding and other parts of processing have significantly reduced the associated levels of error.

10 Accuracy rates in processing Income Tax vary significantly across local offices, ranging from 91 to 99 per cent on Self Assessment and from 66 per cent to 93 per cent on PAYE in 2006-07. Higher accuracy rates are associated with experienced, well trained staff, lower staff turnover and workloads that require less processing by hand. Some offices have achieved substantial improvements by targeting workloads more closely to the skills and experience of staff, increasing management focus on accuracy, and promoting the sharing of good practice and new ideas among staff.

11 Processing work is at the forefront of major changes underway in the Department. These involve strengthening its leadership and management to promote a culture of continuous improvement, modernising its IT systems, re-engineering how processing work is carried out through Lean³ working, and reducing the number of local processing offices. The Department estimates that implementing Lean will improve accuracy rates and increase productivity in processing by 30-50 per cent. Overall it expects to achieve a reduction of around 6,870 full-time equivalent staff. This amounts to savings of £440 million across the Department's processing of Income Tax, National Insurance, Tax Credits and VAT by 2011. The Department expects that to fully embed and sustain the changes made over the past 18 months will take another three to five years.

12 The Department's introduction of Lean processing reflects many of the good practices adopted and challenges faced by other organisations in seeking to improve the accuracy and quality of their processing work and implementing change. Our research on practice

in private sector organisations and other tax authorities found examples where substantial improvements and very high accuracy rates had been achieved. Success often depended on rigorous root cause analysis of error rates and redesigning processes end to end from a customer perspective. It is also important to engender a culture of accountability and good communications with staff, and to involve them in designing solutions, and to provide sufficient training and strong project management.

13 The Department's initial experience of Lean working suggests that significant improvements in the accuracy and efficiency of processing Income Tax are possible. Early results suggest some improvement in the quality and productivity of work, but lead times in completing work have increased. No firm conclusions could be drawn on how Lean working had affected accuracy rates at this stage. Close scrutiny of emerging trends will be important in identifying any unforeseen effects and in assessing action needed to sustain improvements in the longer term. Focus groups with staff have raised questions over whether the way work is now processed in stages may lead in the future to a loss of quality and skills. They have also indicated a need for better communications, management of performance and training.

Overall Conclusion and Recommendations

14 The Department processes most Income Tax cases accurately but the sheer scale of this work means that errors have considerable impact on both the Department and individual taxpayers. The full cost of these errors is largely hidden – in reworking cases to correct mistakes and in the time, cost and anxiety for taxpayers in getting errors put right. Such errors also disproportionately affect more vulnerable groups who are probably less able to deal with them. Initiatives to tackle specific types of error have been successful in reducing their number, and by monitoring accuracy rates in real-time, the Department is now managing its performance more effectively. The Department has embarked on a major programme of change designed to achieve further and sustained improvement while also reducing its costs. Our recommendations are designed to help the Department build on the work already in hand to improve its accuracy in processing Income Tax.

³ Lean working seeks to review processes from the customer perspective to eliminate waste, inconsistency and duplication and to identify and resolve the root cause of problems in performance. The main driver for Lean is to achieve more with less resource, by continuous review and elimination of those activities and processes that do not add value.

- 15** To reduce the level of errors in Income Tax payments and taxpayer records, the Department should:
- Continue to use information on identified errors in the quality monitoring sample of cases to identify and correct other similar cases. [paragraph 2.2]
 - Facilitate sharing of good practice by analysing area accuracy rates against the various factors that can influence performance to identify the reasons for the success of better performers and to learn more about the effects of the introduction of Lean. [paragraphs 2.7 to 2.10, 3.15]
 - By analysing trends in the monthly data, develop an early warning system for emerging problems, which may require adjustments in workload and resourcing or changes in working practice. [paragraph 3.3]
 - As it reviews its targets, adjust its monitoring and reporting of accuracy rates to give a clear picture of the rates achieved, for Self Assessment, PAYE and Income Tax as a whole. [paragraphs 1.10 to 1.15]
 - Build on the success of recent projects by identifying further opportunities for low-cost quick-win projects to reduce errors. These could include automating specific parts of the process or validating manual checks and calculations. [paragraph 3.9]
 - Separate out more complex cases, which generate high levels of error, for processing by specialised teams that have the requisite skills and experience to process them accurately. [paragraphs 1.25, 3.22]
- 16** To manage the costs and consequences of errors, the Department should:
- Assess the cost and incidence of reworking to inform its longer-term decisions on achieving incremental reductions in different types of error, and their relative cost-benefit. [paragraph 1.19]
 - Develop its customer-focused approach by tracking how error rates affect different taxpayer groups and tailor the way it helps taxpayers to understand and deal with the different types of error that might affect them. [paragraphs 1.25, 2.1]
- 17** To build upon its early experience of Lean working in processing, the Department should:
- Reassess the training provided to meet the different needs of staff, taking account of current recruitment patterns and the impact of changes in working practices under Lean. [paragraphs 2.8 to 2.10, 3.17]
 - Strengthen communications with staff by seeking feedback on the effect of changes, and involving them in developing proposals for further improvement. [paragraphs 3.17 to 3.18]
 - Consider how its new approach to working might be reflected in the performance appraisal systems for staff. [paragraphs 3.14 to 3.18]
 - Benchmark its experience with other organisations to identify potential pitfalls and solutions, and further opportunities for improvement. [paragraphs 3.20 to 3.25]

PART ONE

Levels of accuracy in processing Income Tax and their impact

This part of the report explains how Income Tax is administered, and examines trends in processing accuracy and the cost and impact of errors for both the Department and the taxpayer.

How Income Tax is administered

1.1 In 2006-07 the Department collected £149 billion in Income Tax⁴, representing a third of total tax revenues. It spends around £1.7 billion⁵ on administering Income Tax. These costs include the costs of dealing with taxpayer enquiries, compliance work, debt collection, IT, accommodation, and overhead costs, as well as processing costs. Processing costs for Self Assessment and PAYE amounted to £378 million in 2006-07, involving around 15,900 full-time staff. The Department's planned processing costs and staff usage for 2007-08 are £352 million and around 15,300 respectively.

1.2 The Department deals with around 36 million Income Tax payers each year. An individual pays Income Tax on:

- salaries or wages if they are employed;
- employees' paid benefits (such as car allowance);
- profits from their business if they are self-employed;
- State Pension and any private pensions;
- benefits like Jobseeker's Allowance, Carer's Allowance, Incapacity Benefit;
- Benefits in Kind such as company cars;
- other income such as rents or commission.

Everyone who is resident in the UK for tax purposes has a 'personal allowance', which is a level of income that is tax-free. The basic personal allowance in 2006-07 was £5,035. Those 65 or over or registered blind may be entitled to a higher personal allowance.

1.3 The bulk of Income Tax is collected through Self Assessment and the Pay As You Earn scheme (PAYE), with the remainder received via tax deductions schemes. Around £125 billion⁶ is collected through PAYE which covers 27 million taxpayers. The PAYE system operates on the basis that individuals are assigned a tax code which determines the amount of tax an employer should deduct. The PAYE system is also used by pension providers to deduct tax in the same way.

1.4 The Department collects £24 billion⁷ of Income Tax through the Self Assessment system from around 8.5 million⁸ taxpayers. Those who are self-employed need to complete a Self Assessment tax return each year and pay any Income Tax owed in twice-yearly instalments. People with more complex tax affairs, for example if they have income from rents or investments, may also need to complete a tax return, even if they are already on PAYE (see Figure 1).

1.5 The Self Assessment and PAYE systems are also used to collect National Insurance Contributions, Statutory Payments, Student Loans and Capital Gains Tax.

1.6 Ensuring that people pay the right amount of tax depends on people providing accurate information about their income and circumstances, and the Department in turn accurately processing that information. Processing involves checking the amount of tax payable and if it differs from the amount paid seeking additional payments

⁴ Latest estimate for 2006-07.

⁵ 2005-06 cost figure.

⁶ Latest estimate for 2006-07.

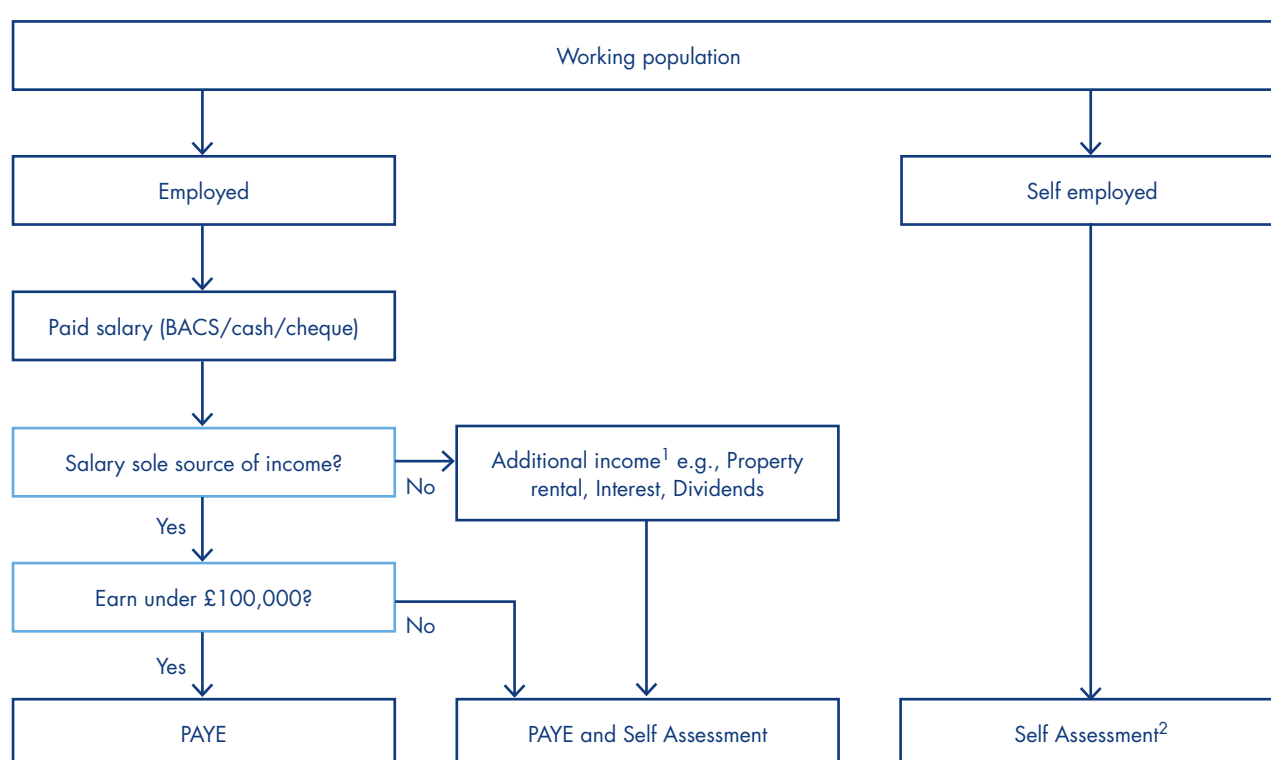
⁷ Latest estimate for 2006-07.

⁸ Income Tax from around 1.5 million trusts and partnerships is also collected via the Self Assessment system.

or making refunds. It also involves updating taxpayers' records and updating individuals' tax codes which are then used by employers to determine the amount of Income Tax they should deduct from employees' future earnings (**Figure 2 overleaf**). Some processing is fully automated, whereas other elements involve manual checks, calculations or input to the Department's systems. Around one in four PAYE tax code notices are processed by hand and approximately 80 per cent of Self Assessment returns currently require some manual intervention, even if they are filed online.

1.7 Currently, processing of Self Assessment and PAYE takes place in around 300 offices across the UK which are grouped into 60 Areas. Ten Areas make up the 'Large Processing Office', and these tend to consist of single large offices in urban areas. The remainder are 'Distributed Processing Offices', which are made up of a number of smaller offices located in more rural areas. The majority of offices process both Self Assessment and PAYE. The Department plans to move processing work to fewer large sites as part of its plans to reduce its estate costs by £100 million a year by March 2008.

1 Overview of the Self Assessment and PAYE tax streams

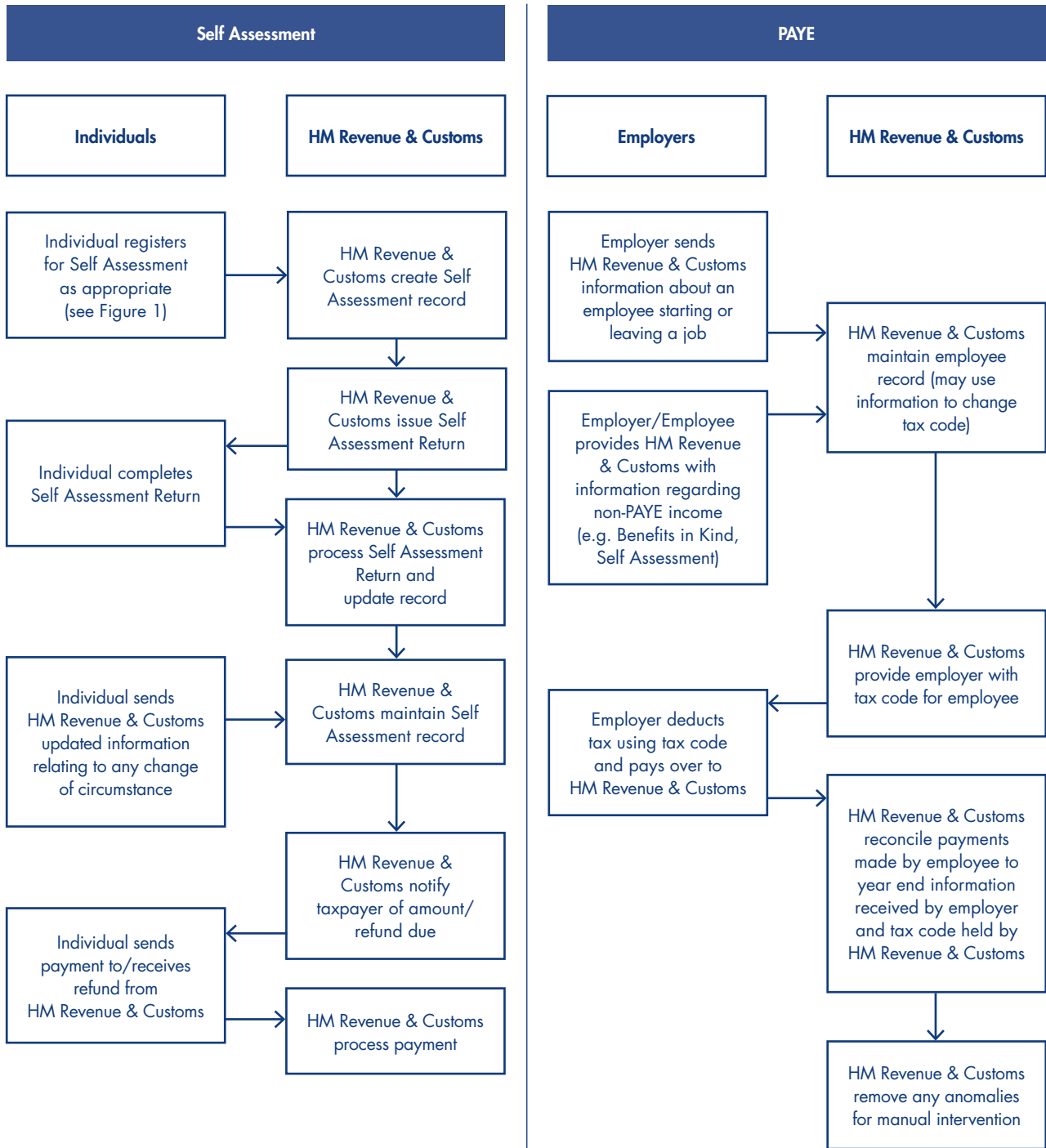


Source: HM Revenue & Customs

NOTES

- 1 Not everyone in this category has to Self Assess.
- 2 There are a number of exceptions for Self Assessment. You must Self Assess regardless if you:
 - Are a company director.
 - Are a Name or member of Lloyd's.
 - Are a minister of religion.
 - Have tax due at the year end that cannot be collected through your PAYE tax code for the following year.
 - Have annual claims against tax for expenses or professional subscriptions of £2,500 or more.
 - Are 65 or over and are entitled to some age related personal or married couple's allowance but not the full amount (unless you have very straightforward affairs).

2 Processing of Self Assessment and PAYE



Source: HM Revenue & Customs

1.8 Processing of Income Tax relates to two of the Department's main objectives in its Public Service Agreement. These are 'to reduce by 2007-08 the underpayment of direct tax and National Insurance contributions due by at least £3.5 billion a year', and 'to improve the customer experience, support business and reduce the compliance burden.' The latter includes a target to increase to at least 95 per cent by 2007-08 the overall rate of accuracy achieved across Self Assessment, PAYE, National Insurance and Tax Credits for manually processed cases only. In 2006-07, the Department achieved a 93 per cent accuracy rate for all four measures combined, compared with a baseline of 91 per cent in 2003-04. It considers it is on course to reach its target in 2007-08. Appendix B provides further details on the Department's targets and performance.

1.9 In assessing processing accuracy, this report focuses on errors made by the Department; not mistakes made by the taxpayer or his/her employer or agent when providing information. The Department classifies errors into two categories. Firstly, tax effect errors where the error results directly in an incorrect calculation of tax liability, e.g. issuing an incorrect tax code which leads to an under/over payment of tax. Secondly, non tax effect errors which result in mistakes in the information held by the Department on the taxpayer, e.g. recording a customer's address incorrectly. While such errors do not immediately affect the tax payable, over time some could lead to incorrect tax calculations. The Public Service Agreement target covers only tax effect errors.

The accuracy rates achieved on Income Tax

1.10 The Department sets a range of internal targets for Self Assessment and PAYE and monitors performance against these. It assesses the accuracy rates achieved by carrying out quality monitoring checks on a sample of around 40,000 cases a year which is designed to produce statistically valid results at both national and Area level (see Appendix B). It measures the following accuracy rates:

- Self Assessment tax effect errors only.
- Self Assessment tax effect and potential tax effect errors that are corrected ('all cases').
- PAYE tax effect errors in all cases.
- PAYE tax effect errors in manually processed cases only.

Non tax effect errors for Self Assessment and PAYE are monitored and included in feedback to Areas to prevent reoccurrence.

1.11 Combining the measures used to assess the tax effect errors, the Department processed 95.2 per cent of Income Tax cases accurately in 2005-06, and has increased this to 95.4 per cent during 2006-07.

1.12 Figure 3 overleaf shows the accuracy rates achieved for Self Assessment and PAYE since quality monitoring was introduced (Appendix 2 provides more detailed data). The 'all cases' accuracy rate for Self Assessment has ranged between 72 and 78 per cent since 2001-02, improving to 78.1 per cent in 2006-07 but falling short of the 2006-07 target of 84 per cent. Tax effect accuracy rates on Self Assessment have been much higher and have improved since 2001-02. In 2006-07 the accuracy rate was 96.5 per cent, just below the target of 97 per cent set for that year. The Department's target is to increase the accuracy rate to 97.5 per cent for 2007-08.

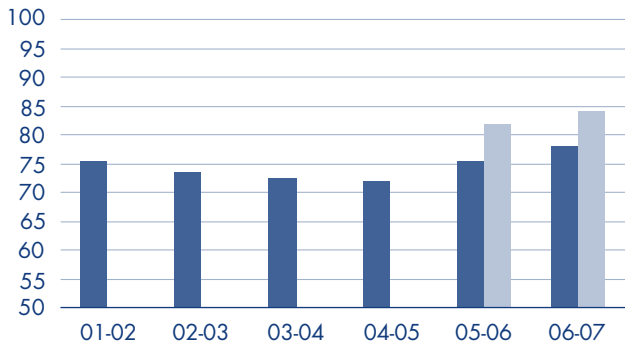
1.13 The Department does not publish accuracy rates for non-tax effect errors. Some of these errors may have an impact on the taxpayer, for example where a person's address is incorrectly recorded, leading to paperwork not reaching them. In the main though, these errors relate to the maintenance of Departmental systems and do not have an impact on the taxpayer. The Department records all errors identified, irrespective of whether or not there is an impact on the taxpayer, providing feedback to staff and carrying out supplementary checks to prevent reoccurrence.

1.14 On PAYE, the tax effect accuracy rate for all cases gradually improved from 2002-03, but fell during 2005-06 to 94.7 per cent. 2006-07 results displayed a slight improvement to 95.1 per cent, but fell short of the target of 98 per cent (see Appendix 2). The majority of PAYE cases are processed automatically, which should guarantee 100 per cent accuracy. Of the 510 cases examined in the Department's 2006-07 review to validate this assumption, 1 was incorrect, giving 99.8 per cent accuracy. The error was not an error in the automated process as such; rather it arose because the case had not been entered on the system. The 2006-07 review was the first formal validation exercise in this area and a review will now be conducted annually. Automatic processing involves a review of each PAYE customer every year, making sure that the employer has used the correct tax code and collected the correct amount of tax for the pay received. Any inconsistencies are then investigated and the case is processed manually. Around 25 per cent of PAYE cases are more complex and require processing by hand which is more prone to error. For manually processed cases, the accuracy rate steadily declined since 2002-03 to 79.9 per cent in 2005-06 (Figure 3). However, performance improved during 2006-07 to 82.1 per cent. While this is below the target of 91 per cent, the Department aims to increase the accuracy rate to 93 per cent for 2007-08.

3 Processing accuracy performance for Self Assessment and PAYE 2001-02 to 2006-07

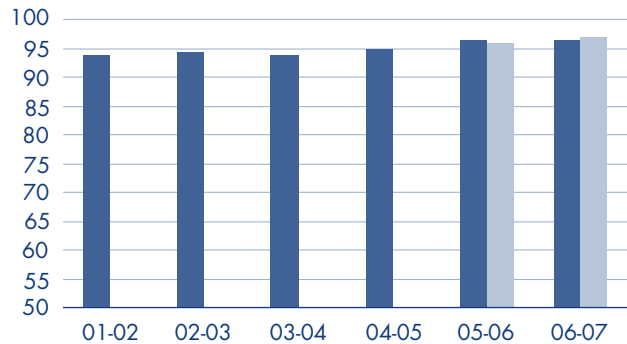
Self Assessment all cases

Per cent accuracy



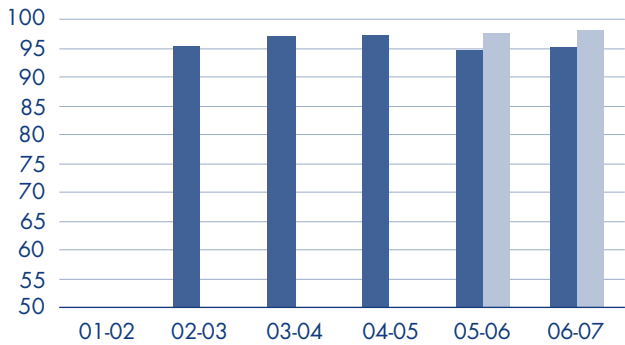
Self Assessment Tax Effect cases

Per cent accuracy



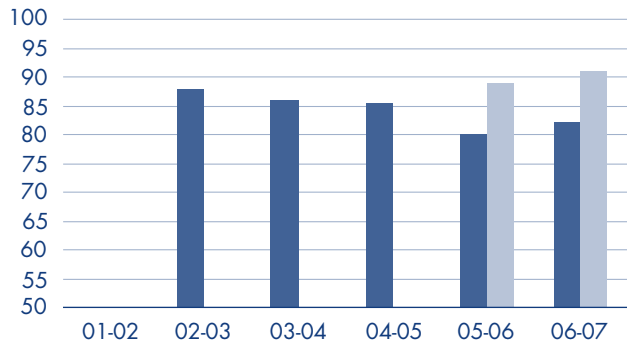
PAYE Tax Effect (all cases)

Per cent accuracy



PAYE Tax Effect (manually processed cases only)

Per cent accuracy



■ Result ■ Target

Accuracy measure	Definition	Contributes to PSA Target?
Self Assessment 'all cases'	Self Assessment processing accuracy measured by taking in to account errors that have a direct tax effect and errors that could potentially have a tax effect, such as coding errors, but the Department corrects them in an annual reconciliation exercise before they affect the tax paid.	X
Self Assessment Tax Effect cases	Self Assessment processing accuracy, measured by only counting as errors those that have a direct tax effect.	X
PAYE Tax Effect (all cases)	PAYE processing accuracy accounting for both automatically processed and manually worked cases, measured by only counting as errors those that have a direct tax effect.	✓
PAYE Tax Effect (manually processed cases only)	PAYE processing accuracy for manually worked cases, measured by only counting as errors those that have a direct tax effect.	✓

Source: HM Revenue & Customs quality monitoring data

NOTE

Comparable monitoring of PAYE quality did not commence until 2002-03.

1.15 It is likely that the downward movement in accuracy rates stems in part from changes in the caseload. Since 2004-05 certain taxpayers with simpler financial affairs are no longer required to file a Self Assessment tax return. Though this brings wider benefits, it has increased the volume of more complex PAYE processing as their cases are now processed entirely through this system. Around 1.15 million cases were transferred in 2004-05, 300,000 cases in 2005-06 and 215,000 cases in 2006-07.

The financial effects and wider impact of errors on the Department and taxpayers

The effect of processing errors on tax payable

1.16 The Department estimates that in 2006-07 inaccurate processing led to a total⁹ of 3.6 million errors under Self Assessment and 2.8 million for PAYE. Only 340,000 of the 3.6 million Self Assessment errors affected individuals' tax liability. This is because Self Assessment coding errors do not have a lasting tax effect, as the Department corrects them in an annual reconciliation before they can affect the tax paid.

1.17 Because the estimates are based on a statistical extrapolation, it is not possible to identify all of the individual cases where errors have been made. Nevertheless the Department does correct those errors it identifies and those which may be brought to its attention by a taxpayer or agent. In the National Audit Office's survey of tax agents, 93 per cent felt that the majority of errors were identified by a taxpayer or agent. After allowing for such corrections, the errors resulted in around 500,000 taxpayers being undercharged by £125 million (see Figure 4) and around 540,000 taxpayers being overcharged £157 million (see Figure 5 overleaf). Total undercharges decreased by around 10 per cent from 2005-06, but total overcharges increased by approximately 30 per cent. This reflected an increase in errors associated with failure to accurately repair all obvious mistakes made by the customer on their Self Assessment Return. The Department is investigating the reasons why this occurred. Under and overcharges on PAYE are slightly higher than in 2005-06 reflecting the change in caseload from moving some taxpayers from Self Assessment to PAYE.

4 Estimated undercharging of tax payable as a result of Self Assessment and PAYE processing errors (2005-06 and 2006-07)

Undercharges	Levels of error before corrections ¹		Levels of error after allowing for corrections ²		Per cent change (after corrections)
	2005-06	2006-07	2005-06	2006-07	
Overall effect (Self Assessment and PAYE)					
Tax undercharged	£249m	£217m	£139m	£125m	-10
Number of cases with net undercharge³	N/A⁴	681,599	483,075	501,848	4
Average undercharge per case in error	N/A⁴	£318	£287	£249	-13
Self Assessment					
Tax undercharged	£78m	£54m	£49m	£33m	-33
Number of cases with net undercharge ³	N/A ⁴	128,490	102,730	92,854	-10
Average undercharge per case in error	N/A ⁴	£422	£477	£351	-26
PAYE					
Tax undercharged	£171m	£163m	£90m	£92m	2
Number of cases with net undercharge ³	544,882	553,109	380,345	408,994	8
Average undercharge per case in error	£314	£296	£237	£225	-5

Source: HM Revenue & Customs quality monitoring data

NOTES

- 1 Actual undercharge extrapolated from sampling.
- 2 Outstanding undercharge after corrections and likely corrections (likely corrections based on those cases still under review).
- 3 Includes only cases with a quantifiable undercharge. This is slightly fewer than the total cases in error because the cost of some errors cannot be quantified.
- 4 Data cannot be extracted from reporting system.

⁹ This does not include procedural or maintenance errors (see paragraph 1.13).

1.18 The estimates in Figures 4 and 5 relate only to the effects of errors in the Department's processing of Self Assessment and PAYE. In my report on HM Revenue & Customs' 2005-06 Accounts I reported Internal Audit estimates of the tax at stake arising from various problems in operating PAYE. These estimates relate to inaccuracies in information provided by employers and employees, delays in processing as well as staff errors in processing. The results of further work on controls over the collection of Income Tax through Self Assessment and PAYE will be published in my report on the 2006-07 Accounts later in July 2007.

The wider effects of processing errors

1.19 Where errors are identified, the Department incurs further costs in reworking to correct them. It estimates that it carried out rework on around 1 million errors in 2006-07 but it has no information on the likely costs involved.

1.20 Processing errors also have wider effects on the Department's front line staff. The National Audit Office's focus groups with processing staff indicated that re-work caused by errors can significantly affect their workload and morale. Re-working cases adds to the pressure on processing staff as it increases the volume of work to be completed, while still needing to meet time and accuracy targets. Front line staff also deal with customers seeking to get processing errors corrected, who sometimes become angry and frustrated particularly if they are passed to different members of staff or receive conflicting information. The National Audit Office's report on 'Helping individuals to understand and complete their tax forms'¹⁰ commissioned market research consultants to test contact centre staff's response to queries from customers seeking information and advice on a range of tax issues. The results indicated that the Department sometimes provided inconsistent or incomplete information on some questions. The report also found that some callers who should have been transferred to more expert staff members were not and that where staff do not transfer more complicated queries to more expert staff, there is a risk of incorrect advice being given.

5 Estimated overcharging of tax payable as a result of Self Assessment and PAYE processing errors (2005-06 and 2006-07)

Overcharges	Levels of error before corrections ¹		Levels of error after allowing for corrections ²		Per cent change (after corrections)
	2005-06	2006-07	2005-06	2006-07	
Overall effect (Self Assessment and PAYE)					
Tax overcharged	£297m	£357m	£120m	£157m	31
Number of cases with net overcharge ³	N/A ⁴	805,391	478,210	541,608	13
Average overcharge per case in error	N/A ⁴	£443	£250	£289	16
Self Assessment					
Tax overcharged	£82m	£144m	£22m	£46m	109
Number of cases with net overcharge ³	N/A ⁴	180,407	101,840	116,560	14
Average overcharge per case in error	N/A ⁴	£799	£208	£398	91
PAYE					
Tax overcharged	£215m	£213m	£98m	£111m	13
Number of cases with net overcharge ³	594,164	624,984	376,370	425,048	13
Average overcharge per case in error	£362	£341	£261	£262	0

Source: HM Revenue & Customs quality monitoring data

NOTES

- 1 Actual undercharge extrapolated from sampling.
- 2 Outstanding undercharge after corrections and likely corrections (likely corrections based on those cases still under review).
- 3 Includes only cases with a quantifiable overcharge. This is slightly fewer than the total cases in error because the cost of some errors cannot be quantified.
- 4 Data cannot be extracted from reporting system.

¹⁰ *Helping Individuals understand and complete their tax forms*, National Audit Office Report HC 452, 2006-07.

1.21 Errors affected the tax payable of 1.6 million taxpayers¹¹ (300,000 from Self Assessment, 1.3 million from PAYE), many of whom incur the added burden of contacting the Department to get errors corrected. After allowing for corrections, the average error was £351 on Self Assessment and £225 on PAYE (Figure 4) for those that are undercharged tax. For those that are overcharged tax, the average error was £398 on Self Assessment and £262 on PAYE (Figure 5). **Figure 6** shows the scale and distribution of over and underpayments. Most overpayments and underpayments are for £250 or less. The most common level of underpayment is between £76 and £250 and the most common level of overpayment is between £26 and £75 for Self Assessment and between £76 and £250 for PAYE. Around 9 per cent of Self Assessment overpayments and 5 per cent of PAYE overpayments fall in the range of £1,001 to £5,000. 7 per cent of Self Assessment underpayments and 5 per cent of PAYE underpayments also fall within this range. Around 1 per cent of Self Assessment overpayments and 2 per cent of Self Assessment underpayments are above £5,000.

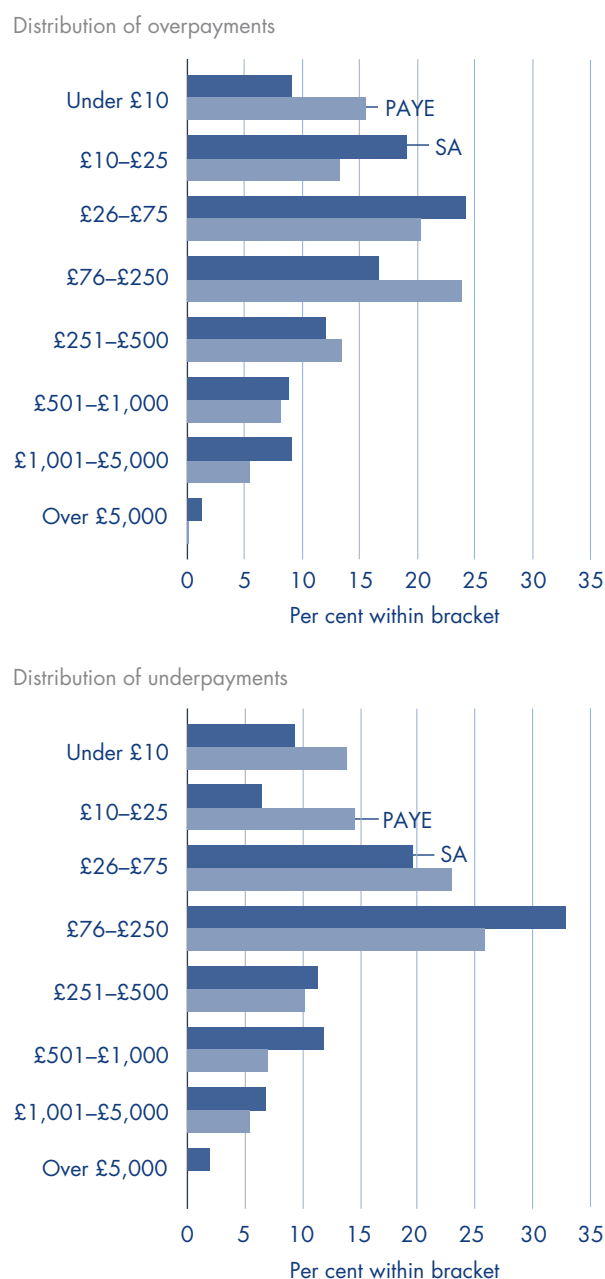
1.22 If underpayments are subsequently detected the Department may seek repayment, resulting in an unexpected bill for the taxpayer perhaps several years later. The Department only waives underpaid tax in limited circumstances, which are set out within the provisions of Extra Statutory Concession A19. This states that: “Tax will normally be given up only where the taxpayer:

- was notified of the arrears more than 12 months after the end of the tax year in which HM Revenue & Customs received the information indicating that more tax was due (‘time test’), and
- could reasonably have believed that his or her tax affairs were in order (‘reasonable belief test’).”

Both tests must be satisfied for the concession to be granted. Taxpayers are obliged to understand and check any documentation sent to them by the Department and subsequently inform them of any errors. These obligations are underpinned by the ‘reasonable belief test’. In some cases, this can leave the taxpayer feeling that the Department’s actions are unjust (see case studies in Figures 8 and 9). Figure 8 gives two cases reviewed by the Adjudicator’s Office (see paragraph 1.24). In the first example, ‘Mr L’ was expected to realise that the Department had made an error in his Coding Notice by not including his benefits, despite him contacting them several times to provide this information. The second example is

a case that was upheld after meeting the conditions for waiving underpaid tax. Figure 9 is a case reviewed by the Parliamentary Ombudsman, where ‘Mr A’ was expected to spot that the Department had used an incorrect amount for his pension in calculating his tax code.

6 Distribution of tax overpayments and underpayments for Self Assessment (SA) and PAYE in 2006-07

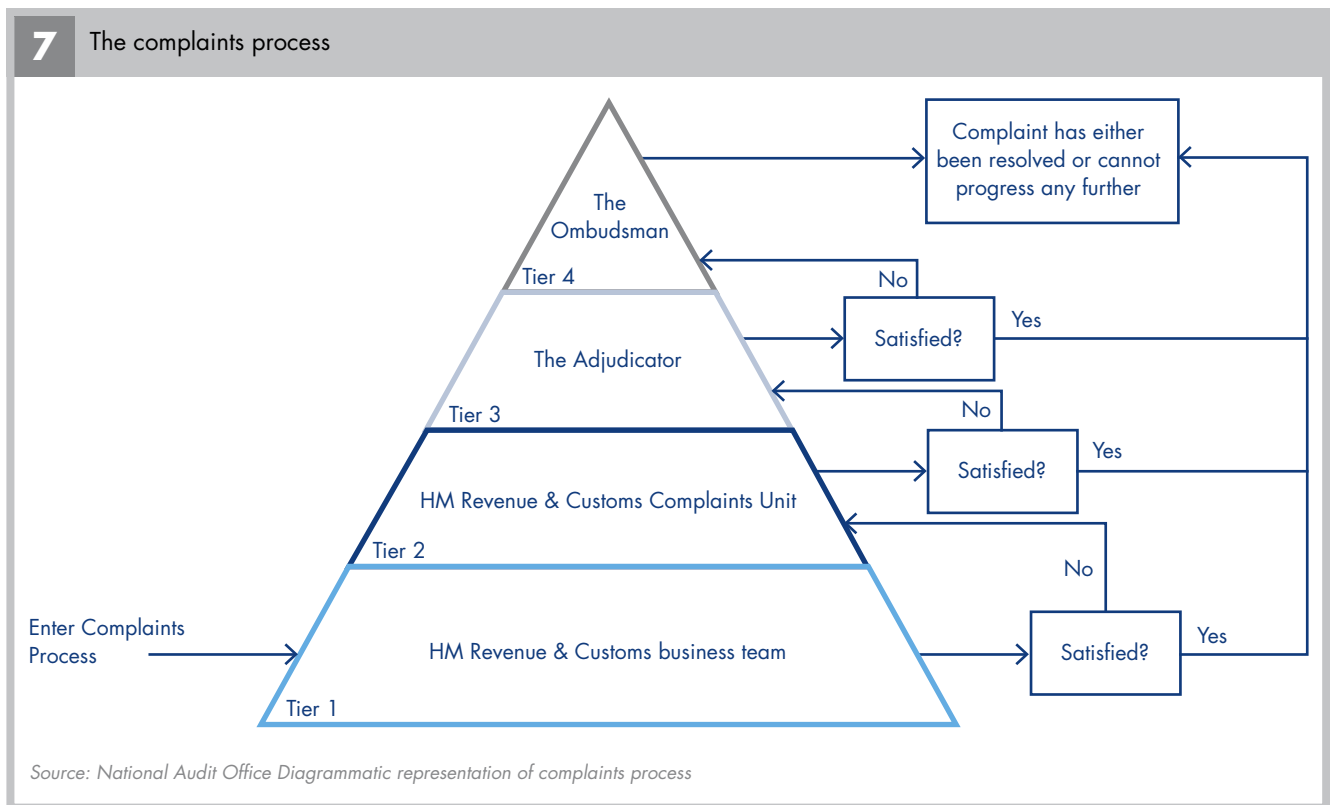


¹¹ The number of taxpayers affected is less than the number of errors as individual taxpayers may be affected by multiple errors. The 1.3 million includes around 100,000 PAYE cases where it is not possible to quantify the overcharge or undercharge.

1.23 We conducted web-based research into redress arrangements for other tax administrations and found that the UK's guidelines are broadly in line with those from other countries. A selection of countries (including New Zealand, Australia, Canada and Denmark) were examined. The research indicated that in each of the countries it is also the taxpayer's responsibility to ensure that tax information is correct when documentation is received from the tax administration.

1.24 The Department operates a two-tier internal complaints system, logging a total of around 100,000 formal complaints a year. No estimate of the numbers involving Income Tax processing is available. Initially, a complaint is handled by front line staff in the area where it arose. If the customer remains unsatisfied, they can request a review, generally by a specialist complaints unit. The Department is planning to phase out the complaints unit in favour of resolving complaints at the front line.

Approximately 90 per cent are resolved at Tier 1 and 99 per cent by Tier 2. Beyond this, the complainant has the right to have their case reviewed independently by the Adjudicator's Office. The role of the Adjudicator is to consider the decisions reached by HM Revenue & Customs and decide whether those decisions, and the way they have exercised discretion, have been reasonable, or, at the very least, not unreasonable, when compared with internal instructions, guidelines and the provisions of extra statutory concessions. The taxpayer can at any time ask their Member of Parliament to take up their case, or to refer their complaint to the Parliamentary Ombudsman. The Ombudsman will normally expect the complainant to have had their case already considered by HM Revenue & Customs and the Adjudicator (see Figure 7). Although the Department resolves the majority of complaints internally in a timely manner, some complaints can take a considerable time to be resolved, causing frustration, upset and stress, as illustrated by the case examples.



8 Case examples from the Adjudicator's Office

On this occasion, HM Revenue & Customs made a number of mistakes, which led to Mr L unknowingly underpaying tax because no tax was deducted for the private fuel benefit provided by his employer. Mr L felt that HMRC should not seek to recover the underpaid tax, as he had provided them with information to ensure his tax affairs were in order. HMRC did not agree to waive the tax, and Mr L contacted the Adjudicator in August 2006.

Mr L started working for his current employer in January 2003 and was supplied with a company car and fuel card, which included private fuel use, in March 2003. Mr L's employer was adamant that the appropriate form (P46 (car)) was sent to HM Revenue & Customs in July 2003; however, HMRC has no record of receiving this.

Mr L said he telephoned HMRC three times in September 2003, July 2004 and March 2005 and, on each occasion, provided details of his company car and fuel card. HMRC has no record of these calls. However, since Mr L's tax code was amended (incorrectly) around these dates, HMRC has given Mr L the benefit of the doubt and accepts that he did call. Despite this, HMRC did not include the car fuel benefit in Mr L's tax code for 2003-04 and 2004-05, resulting in him underpaying tax by a total of £1,671.74. Mr L felt he had made every effort to ensure his tax affairs were in order and consequently, HMRC should not seek to recover the underpaid tax.

HMRC did not notify Mr L of the 2003-04 underpayment until 28 June 2005, hence the time test for waiver was satisfied, as this was later than 5 April 2005. However, HMRC issued at least two tax codes on 2 October 2003 and 10 July 2004, which did not include any deduction for car fuel benefit. HMRC claim that it was reasonable for Mr L to have checked the completeness of each of those tax codes and realise that the car fuel benefit was excluded. As a result, the reasonable belief test was not satisfied and HMRC did not waive the outstanding tax. The Adjudicator did not uphold the claim as they believed (based on the evidence they had seen) that HMRC's decision not to waive the underpaid tax was reasonable. HMRC finally included fuel benefit in Mr L's tax code on 20 August 2005, and sent out a revised calculation of what was due for 2003-04 and a calculation for 2004-05 on 15 September 2006, taking around 14 months to conclude this case.

In his correspondence to the Adjudicator, Mr L stated that the situation caused both him and his family 'a great deal of upset, sleepless nights and stress'. HMRC paid Mr L a total of £135 compensation; £80 in recognition of the worry and distress suffered as a result of their mistakes, £30 in recognition of the poor handling of Mr L's complaint, plus £15 to cover the direct costs incurred whilst trying to resolve his tax affairs. The Adjudicator considered these amounts to be reasonable.

HM Revenue & Customs set incorrect personal allowances against Mr B's income and pension that led to underpayments totalling £10,600 for the years 2001-02, 2002-03 and 2003-04. The case was passed to the Adjudicator.

HMRC had not issued any coding notices to Mr B in respect of his source of income until late 2003. It was not until it processed Mr B's 2003 Self Assessment tax return that HMRC realised he was wrongly receiving the benefit of full allowances on both his pension and income. HMRC sent a bill for the £10,600 underpayment on 1 November 2003, and Mr B, concerned about the underpayment that had arisen, contacted the Inland Revenue on 10 November 2003. After exhausting the Department's internal complaints procedure, the case was passed to the Adjudicator.

Source: The Adjudicator's Office

Since the Department did not issue a tax code or ask Mr B to complete a Self Assessment tax return until May 2003, the time test for waiver was passed, as the Department failed to notify Mr B of the underpaid tax within 12 months of the end of the year in which Mr B first took paid employment. The Department accepted that it did not issue any coding notices to Mr B; hence he had no way of knowing exactly what allowances had been included in his code. Hence the reasonable belief test was satisfied. The case was upheld and the Department waived the £10,600 tax due. This case was closed at the Adjudicator's Office on 13 May 2005, taking 18 months to be resolved.

9 Case example from the Parliamentary Ombudsman

Mr A had an incorrect tax code for 2003-04, 2004-05 and 2005-06. This error was caused by HMRC in calculating his tax code, leading to an underpayment that Mr A felt should be waived. HMRC did not uphold the case and Mr A was referred to the Ombudsman in October 2005, and the case was resolved in February 2006.

Mr A believed that the undercharged tax should be waived, as HMRC had admitted that they were in error for giving him an incorrect tax code. The case failed both the time test (HMRC notified Mr A of his tax arrears in June 2005 after he visited an enquiry centre) and the 'reasonable belief test', because HMRC sent Mr A a coding notice for 2004-05 that identified the amount for his pension (the pension amount is stated explicitly on the coding notice). Therefore, HMRC believed that responsibility lay with Mr A to realise the error and resolve it.

Source: Parliamentary Ombudsman

HMRC claimed the underpaid tax in full. Mr A believed that under the circumstances, HMRC should waive the underpayment and said that the situation had caused him "a considerable amount of stress, which he does not need at his age". This case took around eight months to be concluded.

HMRC did however admit its error for subsequent years, and offered Mr A a total of £80 to recognise and acknowledge the mistakes that had been made (£50 for stress and worry, £5 for costs and £25 to reflect their poor handling of the situation).

After investigating, the Ombudsman was satisfied with HMRC's interpretation of events, and that it was correct in claiming the undercharged tax from Mr A. In addition, the Ombudsman believed that the proposed payment was an appropriate apology for the error.

1.25 Taxpayers with more complex tax affairs are more susceptible to processing errors. For example, the accuracy rate for manually processed PAYE cases for pensioners was 77 per cent in 2006-07, lower than the 82.1 per cent accuracy rate for all such cases. Taxpayers with multiple sources of income, those who frequently change jobs such as agency workers, and those with benefit entitlements also have more complex tax affairs.

1.26 We sought the views of various organisations that offer support and advice to more vulnerable taxpayers. TaxAid, which provides advice to individuals on low incomes, told us that questions relating to Self Assessment and PAYE made up the bulk of their taxpayer enquiries – around 4,000 out of 6,100 in total in 2006-07. TaxHelp for Older People (TOP) provides free professional tax advice to older people on low incomes, dealing with in the region of 5,000 client calls annually. The most frequently occurring issue dealt with by TOP is the provision of PAYE

coding advice. During 2006-07, 2,260 calls of the total 5,380 (42 per cent) involved checking or advising on PAYE coding. The second most common category logged was guidance on Income Tax rates or personal allowances, featuring in 1,690 (31 per cent) of the calls. Help and advice with Self Assessment returns also occurred in 1,380 (26 per cent) of the calls¹². The average refund recovered by TOP across all its cases was £840 during 2006-07. TOP considered the main problem was in pensioners actually recognising themselves that tax has been overpaid. They also considered that appeals to the Department to waive tax due following processing error were much harder to contest as the Department was tightening the guidelines on what a taxpayer can reasonably be expected to understand about their affairs. TOP achieves around a 50 per cent success rate in such instances. **Figure 10** gives examples of cases dealt with by TaxAid and TOP.

10 Illustrative examples of cases dealt with by Tax Help for Older People and TaxAid

TOP

Mrs S, 79, was pursued by HM Revenue & Customs for failing to provide tax returns which they had been sending to an address she left nine years previously. They demanded £1,200 in arrears with penalties and interest. The TOP adviser successfully demonstrated that Mrs S did not have a tax liability. As her allowances exceeded her income, she was in fact owed a refund. HM Revenue & Customs apologised and made a consolatory payment.

TaxAid

Mrs A was incorrectly given a code for unrestricted children's tax allowance in 2002-03. This code remained in use until 2006, resulting in a total underpayment of £4,060, unbeknown to Mrs A. Mrs A had no income when HM Revenue & Customs contacted her to reclaim the underpaid tax. Mrs A faced a large unexpected debt as a result of HM Revenue & Customs' processing error. TaxAid successfully claimed extra-statutory concession A19 (see paragraph 1.22) to cancel this debt.

TOP

Mr & Mrs D contacted TOP with a tax query. On investigation, TOP found they had been overpaying tax for years – he was a 10 per cent taxpayer and she was a non-taxpayer. £5,000 tax was recovered.

TaxAid

Mr R was both employed and drawing occupational pension. With no liaison, HM Revenue & Customs issued an incorrect tax code without allowing for Mr R's employment. When Mr R's employment ceased, the receipt of Mr R's P45 triggered HM Revenue & Customs to review his tax position and he was promptly informed of a £5,000 underpayment due immediately under Self Assessment. Mr R's total annual income is now £7,000 per year. He has had to negotiate time to pay the tax, interest and surcharges.

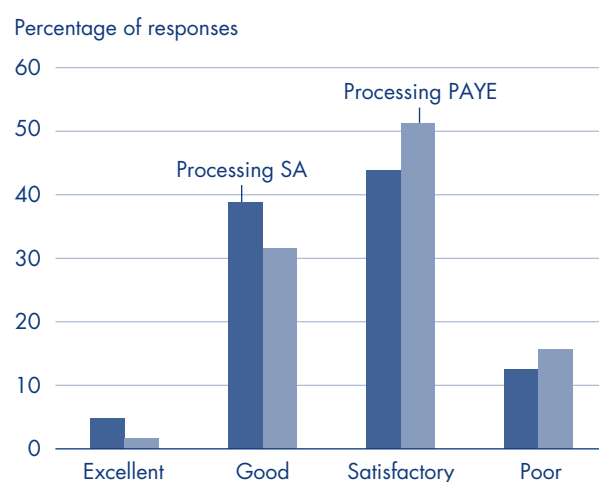
Source: *Tax Help for Older People and TaxAid*

¹² One call can cover multiple issues.

1.27 A further effect of errors on taxpayers is the amount of time they or their accountants and tax advisors, spend on dealing with errors by the Department. In the National Audit Office's survey of tax agents, 44 per cent of respondents saw the main consequence of Income Tax processing errors as the time required to resolve the issue. The relationship with their clients can also be affected, as clients may believe that the agents have caused the mistake. The majority of respondents judged the average financial impact on agents to be between £76 and £100 per error, with an average of up to 30 minutes spent on each (see Appendix C). The results suggest the costs to taxpayers of resolving errors could be at least £200 million in total.

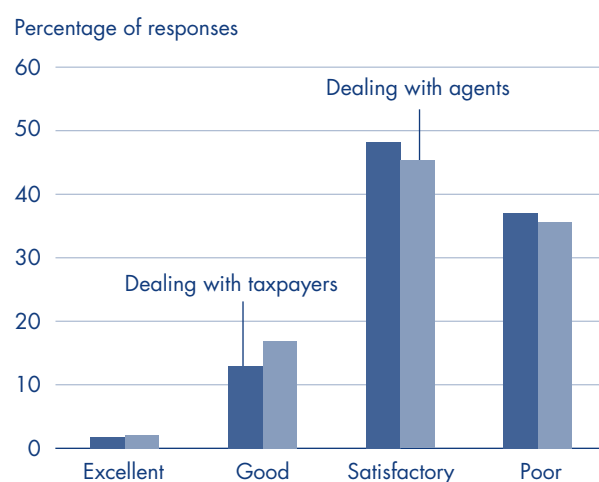
1.28 Overall 77 per cent of agents responding rated the Department's accuracy in processing Income Tax as 'satisfactory' or better (**Figure 11**). 60 per cent rated the Department's efficiency in dealing with taxpayers and agents as satisfactory or better (**Figure 12**). On the Department's helpline service to deal with errors and queries, 53 per cent of agents rated this as satisfactory or better. 48 per cent had noticed a deterioration in service from the tax offices they have dealt with over the past five years. In particular, respondents commented on slower response times and an overall decline in service since the introduction of contact centres. Lack of staff knowledge regarding technical queries was also a common concern, although there was positive feedback about the new helpline dedicated to agents.

11 Agents' overall rating of the Department's accuracy in processing Self Assessment and PAYE



Source: National Audit Office survey

12 Agents' overall rating of the Department's efficiency in dealing with taxpayers and agents



Source: National Audit Office survey

PART TWO

The causes of error

This section of the report examines the factors that give rise to errors in processing Self Assessment and PAYE.

2.1 While most people's Income Tax is processed accurately, the likelihood of error increases as individual taxpayers' circumstances become more complex. Processing of Self Assessment and PAYE have become more complex as a result of changes in the make-up of the labour market, and increasing numbers of people who have multiple sources of income which may be liable to Income Tax (Figure 13). The PAYE computer system was introduced in the 1980s and its records are structured around employments rather than individual taxpayers. More frequent changes in employment and higher numbers of people with multiple sources of income

increase the volume of information the Department needs to process, and the various records it needs to collate to determine or check the Income Tax that is payable.

2.2 The Department analyses its quality monitoring data to identify the main types of error and how frequently they occur. Figure 14 summarises the main error types. Errors such as taxpayers' contact details not being correct do not have a direct effect on tax liability but can have a tax effect further down the line. For example, not updating a change of address can mean that important correspondence doesn't reach the taxpayer (see case example in Figure 10) and recording an incorrect date of birth or failing to record the death of a spouse can in time lead to errors in taxpayer allowances.

2.3 The most frequent type of error in processing Income Tax is the incorrect calculation of tax codes. These codes are used by employers and pension providers to determine the amount of tax to deduct from their employees' pay. In 2006-07, 63 per cent of all tax-effect errors in PAYE related to coding. The volume of coding errors doubled from 2004-05 to 2005-06 to nearly

13 Demographic changes that affect the processing of Income Tax

Population ¹	The UK population continues to age. The percentage of the population aged 65 or over was 13 per cent in 1971 and is forecast to reach 16 per cent in 2007 and 23 per cent by 2031.
Workforce ²	Patterns of employment have changed, with increases in the number of people who change jobs each year, who are employed by agencies, or who have second jobs. The number of migrant workers has also increased.
Income ³	People may have up to eight sources of income including salaries or wages, self-employment income, investment income, State Retirement Pensions, private pensions, disability benefits, other benefits and other miscellaneous income.

Sources: see below

NOTES

- 1 Office of National Statistics data.
- 2 National Statistics: Population Change 2004-2005 and Labour Force Survey – Workforce.
- 3 Department for Work & Pensions: Family Resource Survey published annually from 1998-1999 to 2004-2005. Table 3.3 – Components of gross weekly household income by age of head of house.

14 The main types of error

Errors that directly affect the tax liability (tax effect errors)

- Incorrect tax code issued.
- Tax calculation incorrect.
- Tax calculation not issued.
- Incorrect repayment issued.
- Balancing payments calculated incorrectly.
- Income information captured inaccurately.

Errors that do not directly affect the tax liability (non tax effect errors)

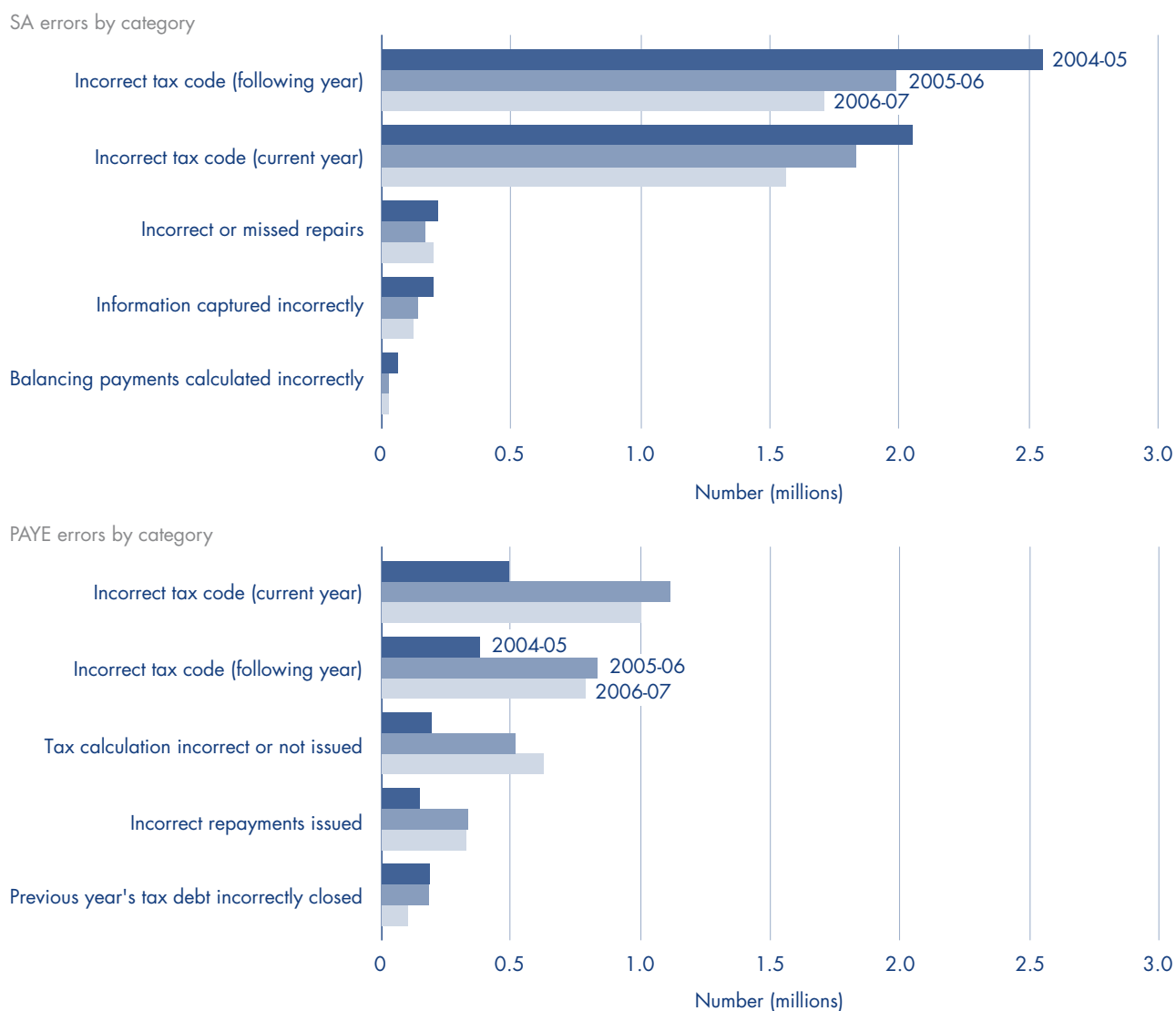
- Taxpayer's personal information is not correct.
- Notes of discussions with taxpayer not updated.
- Cases requiring manual updating not completed.

Source: HM Revenue & Customs quality monitoring data

two million, but reduced to around 1.8 million in 2006-07 (Figure 15). This led to approximately £80 million in tax overpayments and £64 million in underpayments for 2006-07. The Department's 2005 customer service survey

showed that coding enquiries were the main reason for PAYE customers contacting the Department (cited by 28 per cent of respondents).

15 Number of processing errors within Self Assessment and PAYE by category, 2004-05, 2005-06 and 2006-07



Error type

Incorrect tax code (current year)
 Incorrect tax code (following year)
 Incorrect or missed repairs
 Information captured incorrectly
 Balancing payments calculated incorrectly
 Tax calculation incorrect or not issued
 Incorrect repayments issued
 Previous year's tax debt incorrectly closed

Definition

Tax code relating to the current tax year is incorrect.
 Tax code for the following tax year is incorrect.
 Failure to accurately correct all obvious mistakes made by the customer on their Self Assessment return.
 Information from the completed Self Assessment return captured incorrectly when processed by the Department.
 Incorrect tax bills or refunds sent by the Department to the taxpayer.
 Revised tax calculation either incorrect or not issued when required.
 Refunds of overpayments inaccurate.
 Case declared as closed for the tax year preceding that in question without fully resolving all discrepancies and queries.

Source: HM Revenue & Customs quality data

2.4 Coding errors are also prevalent in Self Assessment processing, occurring approximately 10 times more often than all other error types (Figure 15). For those in Self Assessment, the Department calculates an individual's tax code by taking into account all sources of income. The code then determines the amount of tax they pay for that year. Coding errors in Self Assessment do not count as tax-effect errors, as they are effectively corrected at the end of each tax year when an individual's records and tax assessment are updated with the Self Assessment tax return for that year.

2.5 The number of Self Assessment coding errors reduced by 15 per cent between 2005-06 and 2006-07. The Department also achieved a 10 per cent reduction in coding errors for PAYE in 2006-07. The improvement in the accuracy of tax codes in part reflects the switch of workload between Self Assessment and PAYE (paragraph 1.15). It also reflects the Department's use of new software, Coding Assistant, to replace manual collation of data and calculation of tax codes. Coding Assistant reads information from different databases, covering for example allowances and benefits in kind, and automatically calculates the relevant tax code. While the Department made use of Coding Assistant mandatory in July 2005, there were delays in achieving widespread implementation so that it only began to have a major impact in early 2006-07. The Department estimates that Coding Assistant helped to reduce the number of coding errors by around 700,000 in 2006-07. It continues to update and enhance its design.

2.6 Accuracy rates, particularly on PAYE, vary significantly between Areas. **Figure 16** gives a summary of the range in performance for the financial years 2005-06 and 2006-07. In 2006-07 accuracy rates across Areas ranged from 91 per cent to 99 per cent on Self Assessment and 66 per cent to 93 per cent on PAYE. There have also been

fluctuations in accuracy rates between the two years with some Areas achieving noticeable improvements in performance, whilst others have experienced a decline. We found no clear association between the accuracy rates achieved by offices on Self Assessment and the rates they achieve on PAYE.

2.7 We commissioned Europe Economics to conduct econometric analysis of the Department's data to establish the extent of correlation between accuracy rates and other factors relating to the workload and staffing patterns. Appendix D provides further details of the analysis undertaken and the results. Because Self Assessment accuracy rates do not vary greatly, it was difficult to isolate any major driving factors. PAYE accuracy rates are much more variable, reflecting the greater complexity in processing PAYE. This does however mean that factors such as organisation and management capability are likely to be important in explaining the variation. Such factors are not easy to translate into a single measure which could be used in the econometric analysis.

2.8 The analysis showed that the volume of work was not a significant factor affecting accuracy rates in processing Self Assessment and PAYE. Higher accuracy rates were however associated with higher levels of training, lower levels of sickness and staff turnover. **Figure 17** shows the average number and range of sick leave and training days across processing areas. The econometric analysis also showed that smaller offices achieved higher rates of accuracy, possibly reflecting the impact of staffing, workload, organisational and management factors (**Figure 18**). The analysis cannot establish causal determinants of processing accuracy and therefore it does not follow that introducing changes to the factors would necessarily lead to improvements in accuracy. The results are best regarded as identifying areas that may merit further exploration.

16 Range in Area accuracy rates 2005-06 and 2006-07

Year	Tax Stream	Accuracy rates achieved (per cent)	National accuracy rate (per cent)	Range of increases and decreases in Area accuracy rates from previous year (percentage points)
2005-06	Self Assessment (Tax Effect cases)	91.9 to 99.1	96.5	-2.5 to +6.5
	PAYE (manually processed cases)	68.2 to 95.0	79.9	-17.1 to +20.7
2006-07	Self Assessment (Tax Effect cases)	90.9 to 99.4	96.5	-2.9 to +4.6
	PAYE (manually processed cases)	66.2 to 93.0	82.1	-16.3 to +17.4

Source: HM Revenue & Customs quality data

2.9 Our focus groups with processing staff identified inadequate staff training as a cause of processing error. Processing staff felt that individual training needs assessments should be carried out when new staff join to provide targeted learning, rather than the current system of ad hoc training as staff are checked by a quality manager whilst work is carried out. They also felt that computer based training was inadequate. Currently the Department is not recruiting any permanent staff and, in large processing offices, one in four staff are fixed term appointments that are provided with limited training to complete a specific part

of the process. Our survey of tax agents also identified staff training, along with the quality and motivation of staff, as one of the most important factors in affecting accuracy.

2.10 Our visits to several processing offices and our focus groups with processing staff indicated local variations in the organisation and management of Self Assessment and PAYE processing. Areas had implemented a variety of initiatives to improve accuracy rates. Initiatives included making more effective use of staff skills in the allocation of work and training of other staff, raising the profile of accuracy managers and promoting the sharing of practices and new ideas. **Figure 19 overleaf** summarises the types of successful local initiatives we identified in offices with higher/improving accuracy rates. Such initiatives may also have been implemented in other offices as lessons and good practice are shared across areas. It was not feasible to assess the costs and benefits of each initiative, which often accompanied other changes in working practices. These types of local initiatives have largely been overtaken or subsumed by the Department's more fundamental re-engineering of processing work, which we examine in Part 3.

17 Staff sick and training days across Processing Areas 2006-07

	Average number of days per staff member	Range across Areas
Training days	4.5	1 – 13
Sick leave	10	7 – 23

Source: Approximate figures from HM Revenue & Customs data

18 The main results of the econometric analysis

PAYE

- Rural or mixed location offices tend to have higher accuracy rates than urban offices.
- Offices with a higher number of leavers tend to have slightly higher accuracy rates.
- Offices using fewer temporary staff tend to have higher accuracy rates.
- Offices reporting fewer sick days tend to have higher accuracy rates.

Self Assessment

- Rural or mixed location offices tend to have higher accuracy rates than urban offices.
- Offices providing greater amounts of training days tend to achieve higher accuracy rates.
- Offices reporting fewer sick days tend to have higher accuracy rates.
- Smaller offices (with fewer employees) tend to have a higher accuracy rate than larger offices.

Source: National Audit Office summary of findings of Europe Economics econometric analysis

19 Examples of local initiatives to improve the accuracy of processing Income Tax

Initiatives

- Using experienced staff to train others.
- Flexibility of staff and management.
- Allocation of tasks to staff best suited to the work.
- Bonuses to reward individual or team performance or innovation.
- Implementation of quality control at process stage instead of on completed work.
- Raising management profile by being visible and visiting offices.
- Local meetings and newsletters to disseminate performance and quality message and listen to staff suggestions.
- Selecting a member of staff at random each day to sit for one hour with a quality manager and work through cases.

Result

- On the job training used to supplement formal training which results in new staff learning the role more quickly.
- Staff and managers willing to undertake variety of roles taking flexible approach to tasks, workloads and attendance.
- Individual abilities recognised so the best skills are deployed in specific roles.
- Good performance recognised and encourages others to improve quality, working practice and innovation.
- Errors can be identified and eliminated before incorrect coding notices or information is sent to taxpayers and before mistakes impact on other parts of the process.
- Visibility of senior managers has helped to eliminate the 'them and us' attitude which can be divisive. Senior managers are involved in the day-to-day running of offices so they understand local issues.
- Helps prevent working in silos. Also enables sharing of information and ideas. Also enables senior managers to focus on the suggestions and concerns of line-managers and staff.
- Combines quality checking with staff training.

Source: Analysis following National Audit Office visits to tax processing offices

PART THREE

Changes underway to improve the accuracy of Income Tax processing

This part of the report examines changes the Department has been introducing to improve accuracy in processing Income Tax. It looks at changes in the overall organisation and management of processing work, and projects to improve how Income Tax operates and to modernise the underlying IT systems. It also examines the Department's early experience in re-engineering processing work through its Lean initiative and lessons from the experience of other processing organisations in improving accuracy.

Changing the overall management and organisation of processing work

3.1 Since the creation of HM Revenue & Customs in 2005 (from the former Inland Revenue and HM Customs & Excise), the Department has undergone significant organisational change to integrate the two former departments and deliver improvements in taxpayer compliance and customer service, and efficiency savings. Processing work has been at the forefront of this change, as the Department has sought to realise opportunities to drive up quality whilst also reducing costs. Key features of its Pacesetter programme have been to instil a firmer corporate-wide approach and strengthen the leadership and management to embed a culture of continuous improvement. It has also involved re-engineering how processing work is carried out and rationalising how it is dispersed across local offices.

3.2 Of the 12,500 headcount reductions it is seeking to achieve by March 2008, the Department expects to achieve a reduction of 8,500 in processing (a reduction of 27 per cent). It reorganised processing work during 2005 to separate it from compliance work which is also dispersed across local offices. It is now seeking to reduce the number of processing locations, as part of wider plans to reduce its accommodation costs. Following the initial reorganisation, in August 2006 the Department brought together the processing of Self Assessment and PAYE into a single directorate.

3.3 An important aspect of the Department's new approach has been to improve its quality monitoring of accuracy in processing. In November 2005 it introduced monthly, rather than annual, quality monitoring of accuracy rates. This makes it possible to track performance in real time, both nationally and by area, and take more timely action to secure improvement. The monthly quality monitoring of performance together with in-flight checks on work to help processing staff learn and improve has enabled it to undertake analysis of errors in processing and devise solutions to address the more significant underlying problems.

3.4 This monitoring of processing accuracy sits within the Department's wider arrangements for managing all aspects of Income Tax. Management boards for Self Assessment and PAYE ensure that relevant staff from across the Department collectively plan, manage and improve operational performance on the tax as a whole. Performance is monitored using a scorecard which tracks previous, current and forecast performance against indicators relating to each aspect. The current scorecard for Self Assessment assesses the following:

- Public Service Agreement targets, financial and efficiency savings.
- Employee perspective (including measures for leadership, staff satisfaction, skills, knowledge).
- Customer/stakeholder perspective (including measures for customer education, lead times for processing information received, usability of Self Assessment forms, repayment claims and internal stakeholder management).
- Internal productivity.
- Quality.

A similar approach is being developed for PAYE.

Changing the Self Assessment tax returns and requirements

3.5 In 2002 the Department began a major review of Self Assessment with the primary aim of making the process simpler for taxpayers. This led to removing the requirement to file a return for over one million people from 2004-05 (see paragraph 1.15). Following a pilot, the Department also introduced a short tax return for people with simple affairs in 2005. The main tax return is also being redesigned for launch in April 2008. The Department also introduced a simpler, more user-friendly statement of account in August 2006. The cost was £37 million to achieve £40 million in savings for the Department and further benefits for the taxpayer. The Department has also provided customer help cards for particular sections of the return which have traditionally caused problems.

Changing the IT systems

3.6 Processing of Self Assessment and PAYE depends on IT systems, some of which were designed many years ago. The Department has invested regularly in modernising these systems but difficulties remain in linking and extracting information from separate systems to accurately maintain taxpayers' records.

3.7 The Department plans to spend £156 million over the next five years on its PAYE Change programme, aiming to deliver improvements and efficiencies to internal systems and processes. It estimates that successful implementation should deliver efficiency savings of around 3,000 full-time equivalent staff and revenue benefits of at least £300 million a year, including reduced levels of error in tax coding and calculation.

3.8 The most significant part of the programme is the Modernising PAYE Processes for Customers project. Its aim is to further automate PAYE processes, integrate systems and provide a complete view of individuals' tax affairs by making better use of the information the

Department already holds to create a single customer record. Successful implementation should eliminate some major causes of errors, and also improve the speed of processing. Wider improvements in customer service should also be achievable as customer contact staff will have a complete view of the taxpayer's record and history, which should reduce the time required to resolve queries. Phase 1 was completed in 2005 and introduced a new computer system to automatically validate and process Employer Annual Returns. Phases 2 and 3 will increase automation of PAYE processing and deliver the complete view of a taxpayer's record. Phase 2 was completed in April 2007 and Phase 3 is scheduled to commence its phased releases from October 2007.

3.9 The Department has also introduced various low cost initiatives to improve processing by automating specific parts of the process that have hitherto been completed manually. Coding Assistant is one example (see paragraph 2.5) which cost in the region of £80,000 to develop. It also improved the way the PAYE system handles tax due from Self Assessment returns, so that more cases can be dealt with automatically. This initiative cost £1,800 and reduced the number of related tax effect errors by 57 per cent between 2004-05 and 2005-06 and by a further 5 per cent between 2005-06 and 2006-07. Such initiatives have also contributed to efficiency targets by reducing the workload on staff.

Lean processing

3.10 Within the wider Pacesetter change programme, the Department has embarked upon a major business re-engineering project, known as the Lean initiative. Lean working seeks to review processes from the customer perspective to eliminate waste, inconsistency and duplication and to identify and resolve the root cause of problems in performance. The main driver for Lean is to achieve more with less resource, by continuous review and elimination of those activities and processes that do not add value. Using consistent processes also allows more meaningful internal benchmarking.

3.11 Lean principles originated in the manufacturing environment and the Department has drawn on the experience of Unipart in developing and tailoring its Lean approach to its processing environment. The Department has applied Lean principles and redesigned the way it processes Income Tax. The purpose is to streamline key work processes to eliminate duplication or reworking, improve accuracy, increase productivity, and reduce lead times in processing cases. The Department has introduced the Lean principle of in-flight quality checks, complementing its existing Quality Monitoring system, to identify errors immediately and to prevent those errors from affecting the taxpayer. Standard work instructions are now in place for the four key elements of processing to ensure consistency in processing across all Area offices. Working in a standard way provides more flexibility in managing the workload, enabling work to be more easily transferred to other people or locations, for example at peak times. Workplace assessments are carried out to ensure adherence to the standard processes. **Figure 20** shows the main changes in how Income Tax is processed under Lean.

3.12 The Department carried out three Lean pilot studies in three large processing offices. These demonstrated significant improvements in quality and efficiency: a 45 per cent improvement in productivity for processing Self Assessment returns, 35 per cent improvement in quality and a reduction from 36 to six days average lead time for processing information received (see Appendix 5 for definitions of measures). As a result, the Department concluded in August 2005 that it had a major opportunity to use Lean to enhance its management capability and introduce a culture of continuous improvement. During 2006 and 2007, the Department has been rolling out the Lean approach on Self Assessment and PAYE processing in other offices. The forecast cost of implementation across its processing of Income Tax, National Insurance, Tax Credits and VAT is around £14 million including £9 million on consultancy expertise.

20 The main changes in how Income Tax is processed following the introduction of Lean

Pre-Lean

Whole case working where one member of staff processes a tax return from start to finish.

Specialist Self Assessment and PAYE staff.

General guidance on processing a return.

Daily quality monitoring of outputs.

Time lag in dealing with performance issues.

Key tax effect targets and operational targets.

Suite of performance measures covering number of returns, time taken to process, accuracy and other operational objectives.

Fixed teams and teamspace.

Post-Lean

Processing of an Income Tax return broken up into separate stages, with different team members dealing with each stage.

Staff trained in different component parts of the process to enable flexibility.

Standard solutions – detailed standard work instructions to ensure consistency.

→ In-flight quality checks with immediate feedback.

Real-time interventions in culture of continuous improvement.

One target overall incorporating tax effect and non tax effect.

Four key measures – productivity, quality, lead time and staff engagement.

Shift working and hot-desking to enable more flexibility and efficiency.

Source: National Audit Office summary of changes following HM Revenue & Customs Lean implementation

3.13 A key requirement of the tender process was the need to transfer skills rapidly to Departmental staff, to eliminate extended reliance on consultants. To transfer skills, Unipart consultants have trained 149 departmental Lean experts to progress Lean after the planned withdrawal of consultants from March 2007. The Department estimates that implementing Lean across processing will deliver increased productivity of 30 to 50 per cent in processing. By 2011, the Department expects the Pacesetter programme as a whole to deliver Full Time Equivalent staff savings of around 6,870 across its processing of Income Tax, National Insurance, Tax Credits and VAT (see **Figure 21** for predicted yearly benefits profile). This amounts to £440 million cash savings, the majority of which will be achieved through implementing Lean. A staff saving of 1,609, 1,210 of which were attributed to Self Assessment and PAYE processing, was delivered during 2006-07. The Department expects that to fully embed and sustain the changes made over the past 18 months will take another three to five years.

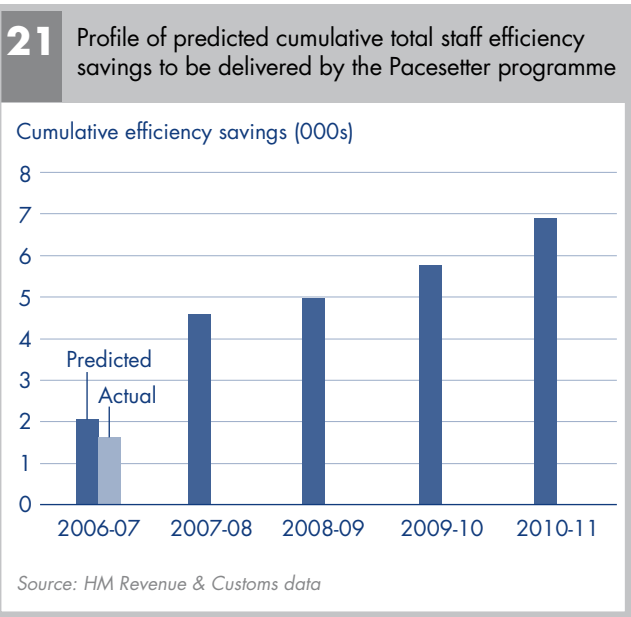
3.14 The Department monitors overall progress in implementing Lean using weekly reports on performance against targets on the four elements of work:

- Processing Self Assessment returns.
- Dealing with notifications of change of employment for PAYE.
- Post (mail received).
- Manually worked PAYE cases.

It assesses performance using measures of quality, productivity, lead times and staff engagement (see Appendix 5 for definitions of these measures). Improving in these areas should benefit both the Department and taxpayers by improving efficiency and customer experience. As at the end of April 2007, performance on both Self Assessment and PAYE had been variable, showing evidence of some improvement in quality and productivity for Self Assessment and manually worked PAYE (Appendix 5 shows the overall performance of Lean offices). The areas where improvement has not yet been achieved are the lead times for clearing post and work on Self Assessment and PAYE, and the quality and productivity in dealing with post. The Department is currently working with front line staff to develop and implement a survey to measure staff opinion. Each site also undergoes a performance assessment at six monthly intervals, benchmarking their performance against current and future targets for each of the assessed measures.

3.15 The econometric analysis also demonstrated (paragraph 2.7 and Appendix 4) a mixed picture on the effect of the Lean initiative. The introduction of Lean in individual offices was accompanied by a slight or no improvement in monthly accuracy rates in Self Assessment. On PAYE it was accompanied by a significant reduction in monthly accuracy rates. This could be due to it taking time for Lean to become effective and an initial deterioration in performance while the new ways of working are being implemented. Allowing for a six month time lag in the analysis shows that the implementation of Lean ceases to be a significant factor in affecting PAYE accuracy rates, suggesting that the reduction in accuracy might be a short run issue during implementation. Thus the econometric analysis provides no firm conclusions about the impact of Lean at this stage of its implementation. Further analysis with more monthly data would be beneficial to learn more about the effects of the introduction of Lean.

3.16 The introduction of Lean working has led to changes in working practices. Staff in the focus groups run by the National Audit Office felt that the intention of the Lean process to ensure everyone adopted a consistent approach was positive and reflected good practice. Participants also agreed that the increased emphasis on quality was a positive change.



3.17 Staff did however feel that at working level the focus was on the quantity of returns processed rather than the quality of their work, running counter to the 'customer first' philosophy of the Department. They felt that the tax system was too complex to break down processing into stages completed by a number of different individuals. They believed that this could increase the risk of errors and affect quality of service, as processing staff could no longer build up a picture of the taxpayer's situation and take all factors into consideration when processing a complex Self Assessment return or a PAYE coding notice. They also felt that working only on a specific section of the process resulted in loss of all round skill and repetition of tasks could result in further errors. The staff described themselves as demoralised, bored, deskilled and felt that they were not getting the necessary training to do a quality job processing a tax that is very complex. They considered that quality checking was carried out with misplaced emphasis in that they felt trivial errors were treated in the same way as errors with a tax effect and feedback concentrated on what was wrong rather than the vast majority of cases that were correct. The Department recognises that whilst non tax effect errors may have no immediate impact on the tax bill, adverse consequences can materialise for both the taxpayer and the Department. It is therefore seeking to achieve error-free working and is doing more work to explain to processing staff how non tax effect errors adversely affect both customers and its own business.

3.18 The Public and Commercial Services Union (PCS) which represents around 80,000 staff in HM Revenue & Customs told us that while it supported new ways of working that improve efficiency and provide a quality service, it was in dispute with the Department over Lean processing techniques. The dispute centres on the lack of agreement on the rollout programme, the need for a proper evaluation of the pilot and for an end to hourly monitoring of performance in processing offices. The PCS recognised that the Department had now commissioned an evaluation of Lean working, and was carrying out a task risk analysis of Lean in one office, with local trade union involvement. It considered that hourly monitoring of individual staff performance and displaying team performance results in processing offices was counter productive. It also had concerns over the use of overtime and staff on short term contracts to meet staffing shortfalls in a period when the Department was seeking to make job cuts. Its view was that the work was under-resourced and this had contributed to backlogs of unactioned letters.

3.19 The Office of Government Commerce carried out an initial Gateway Review of the entire Pacesetter programme including Lean. The Gateway Review concluded that Pacesetter was a complex programme that has a clear vision with strong commitment from senior management and is well run. It highlighted that sustaining the new ways of working would be a significant challenge but that the Department had recognised this. It also made recommendations to strengthen risk management, tracking of headcount savings against target and reviewing the effectiveness of its communications. The next OGC Gateway Review is expected in July 2007. Two further reviews are also underway. Internal Audit is examining the level of adherence to the standard work processes introduced towards the end of 2006. Warwick Business School is reviewing all aspects of delivering the Pacesetter programme which will cover:

- Staff understanding of the aims of Pacesetter and the main elements of Lean.
- The impact of the Lean implementation, highlighting what has been good and less successful, as well as highlighting any problems encountered and how these have been resolved.
- The outcome of implementation including performance and quality improvements, effects of process working and team working and understanding of customer requirements.
- How the changes brought about are being embedded across HMRC and how they can be sustained over the longer term.

Other organisations' experience in improving accuracy of processing

3.20 In developing Lean the Department has worked closely with Unipart and its Lean practitioners. We commissioned PricewaterhouseCoopers to research wider good practice in achieving accurate processing, drawing on case examples from other large processing organisations and overseas tax authorities (see Appendix 6). The Department's introduction of Lean processing reflects many of the good practices adopted and challenges faced by other organisations in seeking to improve the accuracy and quality of their processing work and implementing change.

3.21 The research identified that errors and inaccuracies tended to be a symptom of underlying problems in process design. Consequently, reducing errors usually required an element of process redesign and improvement, focusing on what the customer expects from the business operation. In most of the case studies examined, root cause analysis was instrumental in identifying a variety of underlying problems such as lack of process automation and consequent human error, unnecessary processes and reworking to correct preventable errors. With careful and systematic business process re-engineering, substantial reductions in error rates and very high accuracy rates were possible.

3.22 The research found that for business process re-engineering to be successful it was essential for the organisation to move away from fire-fighting in order to achieve sustained performance improvement. Rigorous project management was needed to ensure the changes are effective. It was not always necessary to have a comprehensive change strategy for the entire organisation but processes needed to be considered end-to-end, otherwise the root cause of errors might not be addressed or other problems might be created elsewhere in the process. In the case of more complex processes, a risk-based approach was important in focusing resources on areas more likely to pose a higher financial risk or have a greater impact. One of the overseas tax authority case studies showed that a sophisticated risk-based approach to focus resource on those tax returns that are more likely to contain errors and/or pose a higher risk of loss, could contribute significantly to improvements in quality and efficiency.

3.23 Technology improvements were important drivers of improvements in processing. In one of the tax authority case studies, technological advances in electronic filing of tax returns were an important factor in driving the performance improvements achieved. Technology can eliminate manual errors by automating routine tasks. In the cases of the insurance company and the retail bank, automating processes eliminated human error in keying data and matching information.

3.24 The research also highlighted the importance of measuring performance in achieving transparency and clear lines of accountability. A balanced set of performance measures, rather than measures with too narrow a focus, were desirable as they better captured the complexity of processes and took account of factors such as staff engagement and customer satisfaction. Performance management systems needed to be applied carefully to avoid counterproductive results. They needed to be supported by a spirit of continuous improvement rather than a blame culture.

3.25 Embedding new processes and reducing errors often depended on wider behavioural change in the organisation. Technology plays a part but it was also very important to motivate staff by engaging them in redesign and incentivising them to achieve continuous improvement. Training and open communication were important factors to sustain changes in behaviours and culture and gain buy-in from staff. Visible management commitment and focus were also essential to making the system work effectively and efficiently.

APPENDIX ONE

Scope and methodology

Scope of the study

1 The study focuses on the accuracy of processing Income Tax Self Assessment and Pay As You Earn, the collection of which are interlinked. We examined the levels of accuracy in processing Income Tax being achieved by the Department, the impact of inaccurate processing on the Department and on the taxpayer, likely causes of inaccuracy and variation in performance and good practice in processing from within the Department and from other processing organisations.

Methodology

2 Analysis of the Department's Quality Monitoring data and the Department's public service agreement targets. We examined the Department's performance against PSA 7, Key Indicator 6 which is a target to increase by 2007/08 the rate of accuracy in administering ITSA, PAYE, NI and Tax Credits to at least 95%. The Quality Monitoring data is used to calculate performance against this PSA target. The Department's network of Quality officers across all processing offices sample cases to check for accuracy. These samples are then extrapolated to provide monthly quality monitoring data including data on accuracy levels, frequency of different categories of error, variation across offices, tax-effect and non tax-effect errors and under/overpayments due to inaccurate processing. We reviewed the data and used it in our analysis of the most frequent types of error and variation in performance over time and across offices as well as to feed into the Econometric analysis conducted by Europe Economics.

3 Econometric analysis of Quality data exploring the effect of a number of variables on the accuracy rate. We engaged Europe Economics to develop an econometric model to assess factors affecting the accuracy of processing Income Tax Self Assessment and Pay As You Earn. The Econometric analysis used the Department's quality data, resource data and workload plans to identify those factors which affect processing accuracy and the size of their effect. The econometric analysis takes the accuracy rate as

the dependent variable and explores the relevance of a set of independent variables which could affect the accuracy of processing for each constituent element of processing. We commissioned Dr Jouni Kuha from the Methodology Institute and the Department of Statistics at the London School of Economics to undertake an academic review of the results of the econometric analysis, including an examination of the methodology, data, assumptions, findings and conclusions. Dr Kuha is a leading academic in the field of statistics and research methodology.

4 Focus groups with front-line processing staff. We engaged Vivas consultancy to run two focus groups. The focus groups drew in staff from several offices and were designed to obtain, in an impartial manner, qualitative views from front-line processing staff. The focus groups comprised three sessions on processes, errors and quality. We aimed to capture the views of front-line staff on issues they face in processing, causes and impact of errors, the effectiveness of the quality management system in place and suggestions for improvement.

5 Visits to local processing offices. We visited three processing offices – the Large Processing Offices of South Wales and Leicester and the smaller processing office in Cambridgeshire. The visits included higher-performing, lower-performing and improving offices, and offices based in one large site and on multiple sites. The visits included interviews with processing managers, quality managers and area managers, to understand reasons for the office's performance, to identify local practices and to understand the effects of introducing Lean working. It also included process walkthroughs and system controls.

6 Stakeholder surveys. We surveyed members of the following organisations: the Chartered Institute of Taxation, the Institute of Chartered Accountants in England & Wales, the Association of Chartered Certified Accountants and the Association of Taxation Technicians. The organisations are professional bodies whose members are experts and practitioners in tax, acting as agents to deal with people's tax affairs on their behalf. Our aim was to gather the

viewpoints and experiences of key stakeholders in the UK tax system on the Department's performance in processing income tax, the impact of error on the taxpayer and on the agent as well as their experiences of dealing with HM Revenue & Customs when trying to rectify an error. We received 354 responses from organisations ranging from a Big 4 practice to small firms and sole practitioners.

7 Analysis of HM Revenue & Customs complaints and survey data and the caseload of the Adjudicator's Office and the Ombudsman. We reviewed the process for making a complaint and the different tiers, from the Department's Complaints Unit to the Adjudicator and the Ombudsman. This was to gain an understanding of wider impacts on the taxpayer when the Department has made an error, how this is brought to the Department's attention and the process and experience of getting an error corrected and seeking redress. We also reviewed cases from the Adjudicator and the Ombudsman to gain a picture of the type of cases they deal with, reasons why cases are upheld and the impact of these decisions on the taxpayer. We also examined and conducted secondary analysis on the results of the Department's Customer Satisfaction Survey which is an annual survey of 18,000 customers from 13 different customer groups including businesses, employers, agents and customers in receipt of benefits. We also examined the results of the Department's separate Contact Centre customer satisfaction survey which looks specifically at the service received by customers who contact the Department by telephone.

8 Cost-benefit analysis of Departmental initiatives. We examined the improvements the Department had introduced and planned, to further automate stages in the processing of Self Assessment and PAYE to reduce the risk of inaccuracy. We examined the costs of the initiatives and compared this with the expected benefits in terms of increased accuracy rates and the actual performance so far.

9 Analysis of the Department's Lean Project. We met with the Project Head, with Senior Management and with Unipart whom the Department have retained as Lean consultants. We reviewed Lean documentation including the business case and initial performance against targets for each office and obtained a Departmental view on Lean performance so far and the monitoring procedures in place.

10 Benchmarking research on processing accuracy in overseas tax authorities and private sector processing organisations. We commissioned PricewaterhouseCoopers (PwC) to review published literature and consult with PwC internal experts to identify good practice and case examples of improving accuracy rates. Case studies comprised a private sector retail bank

and selected overseas tax administrations which PwC reviewed in more detail. In addition, PwC were able to incorporate some further examples from an insurance company and plastics manufacturer. The objectives of the research were to:

- carry out a meta-analysis of existing published information on organisations in the UK and overseas which conduct large-scale processing;
- conduct more in-depth case studies, leveraging PwC's internal expertise and knowledge, to compare and contrast approaches to the management and improvement of large-scale processing organisations;
- set out successful approaches to quality management taking into account specific variables such as error rates, quality targets and process efficiency measures where available; and
- elaborate on associated people issues, on both the customer and the employee side.

11 Stakeholder consultation. We consulted representative groups such as TaxAid and TaxHelp for Older People, examining their case statistics and case files. These specialist organisations exist to offer support and advice to vulnerable taxpayer groups. TaxHelp for Older People is a project run by Tax Volunteers (TV), a registered charity, to provide free professional tax advice to older people on low incomes across the UK. TaxAid is another charity which provides free independent and confidential tax advice to individuals on low income. We also met with the Public and Commercial Services Union, one of the largest trade unions in the UK, with 325,000 members working in government departments, agencies, public bodies and private companies. Its membership includes HM Revenue & Customs processing staff.

12 Advisory Group. We convened an advisory panel to provide advice and feedback to the study team on our audit plans and emerging findings and conclusions. The panel consisted of:

Chas Roy-Chowdhury, Association of Certified Chartered Accountants

Anne Redston, Chartered Institute of Taxation

Robin Summers, Institute of Chartered Accountants in England & Wales

Karen Thomson, Institute of Payroll Professionals

Frances Corrie, TaxAid

Paddy Millard, TaxHelp for Older People/Low Incomes Tax Reform Group

Andy Roger, The Adjudicator's Office.

APPENDIX TWO

PSA Targets and Performance Summary

PSA Targets

The Department has the following PSA targets relating to the processing of Self Assessment and PAYE:

PSA Target Objective I, Target 3: To improve the extent to which individuals and businesses pay the amount of tax due with a target to reduce by 2007-08 the underpayment of direct tax and NI contributions due by at least £3.5 billion a year.

PSA Objective II, Target 7: To improve customer experience, support business and reduce the compliance burden with targets to deal effectively and appropriately with information provided so that levels of contact are kept to a minimum; specifically:

- Key Indicator 6 – to increase by 2007-08 the rate of accuracy in administering manually processed Self Assessment, PAYE, National Insurance and Tax Credits to at least 95 per cent:
 - PSA Target 5, Key Indicator 6 focuses on the Department's accuracy and completeness of handling information provided by customers to the Department in respect of the four tax streams within the target, focusing on manual intervention (as opposed to automated processing undertaken by computers, which have their own inbuilt security and quality checks).
 - Results from each work area are weighted together using the amount of HMRC budget devoted to the administration of each area.

- The baseline for this target is 91 per cent. This is taken from 2003-04 data for Self Assessment and PAYE (manually worked only), and (April to December 2004) data for National Insurance and Tax Credits (year to date data taken because some of the quality monitoring processes were only introduced during 2003-04).
- Performance in 2006-07 (to January) against this target is 93 per cent.

Accuracy rates

Accuracy rates for Self Assessment and PAYE are determined by taking monthly samples from each processing office to build up a cumulative picture of accuracy for each tax year. Error numbers are derived by extrapolating figures up to a National level. Annual sample sizes have been pitched at a level which will ensure the statistical validity of results at a National and Area level. Typically, in the region of 20,000 cases from each tax stream are sampled under quality monitoring checks per annum, which represents approximately 0.3 per cent of the population for each. Accuracy rates are calculated within confidence intervals of less than plus or minus one per cent point, at a 95 per cent confidence level. This means that the Department are 95 per cent confident that the true accuracy rates lie less than plus or minus one percentage point from the reported figures (see actual figures for 2006-07 and an illustration of the confidence intervals overleaf).

22 Rates of accuracy achieved in processing Self Assessment and PAYE 2001-02 to 2006-07 (per cent)

	Part of PSA Target?	2001-02	2002-03	2003-04	2004-05	2005-06	2005-06 Target	2006-07	2006-07 Target
Self Assessment 'all cases' ¹	X	75.4	73.4	72.3	72.0	75.3	82.0	78.1	84.0
Self Assessment Tax Effect cases ²	✓	93.9	94.2	93.8	95.0	96.5	96.0	96.5	97.0
PAYE Tax Effect (manually processed cases only)	✓	N/A	87.8	85.9	85.3	79.9	89.0	82.1	91.0
PAYE Tax Effect (all cases)	X	N/A	95.5	97.0	97.3	94.7	97.5	95.1	98.0

NOTES

1 Self Assessment processing accuracy measured by taking in to account errors that have a direct tax effect and errors that could potentially have a tax effect, such as coding errors, but the Department corrects them in an annual reconciliation exercise before they affect the tax paid.

2 Tax Effect – accuracy measured by only counting as errors those that have a direct tax effect.

Illustration of Confidence Intervals for the 2006-07 results

Precise figures for the 2006-07 confidence intervals:

- SA 'all cases' +/- 0.67%
- SA Tax Effect +/- 0.31%
- PAYE Tax Effect (worked cases only) +/- 0.72%
- PAYE Tax Effect (all cases) +/- 0.005%

Hence, the Department are 95 per cent confident that the true accuracy rates for 2006-07 lie within the following intervals:

- SA 'all cases' [77.43%, 78.77%]
- SA Tax Effect cases [96.19%, 96.81%]
- PAYE Tax Effect (manually processed cases only) [81.38%, 82.82%]
- PAYE Tax Effect (all cases) [95.095%, 95.105%]

APPENDIX THREE

High level results from our Tax Agents Survey

Survey aim

To gain the perspectives of tax agents on HM Revenue & Customs' processing of Self Assessment and PAYE, with particular reference to:

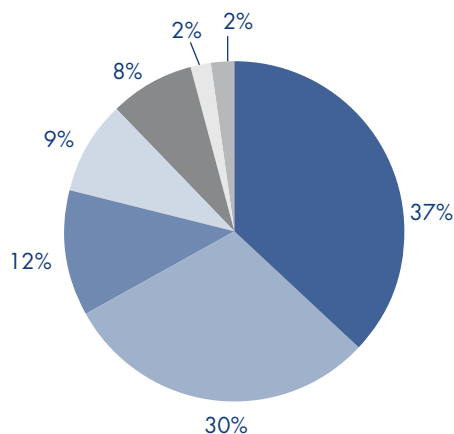
- 1 The main causes and types of error.
- 2 Quantifying the impacts of the errors.
- 3 Identifying areas where HMRC can make improvements to the services it provides.

We surveyed members of the following organisations: the Chartered Institute of Taxation, the Institute of Chartered Accountants in England & Wales, the Association of Chartered Certified Accountants and the Association of Taxation Technicians (membership of these bodies currently stands at around 260,000). The organisations are professional bodies whose members are experts and practitioners in tax, acting as agents to deal with people's tax affairs on their behalf. The survey was designed in conjunction with the above organisations, and then distributed to members via the Chartered Institute of Taxation website. 354 responses were received from agents across a range of practices. Results are an indication of opinion and are not claimed to be statistically significant.

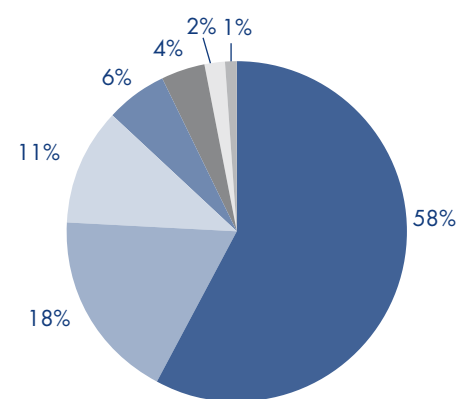
Types of error

Question: Please indicate your top 5 incidences of processing error. The graphs show the error types that were rated as top by respondents.

Self Assessment



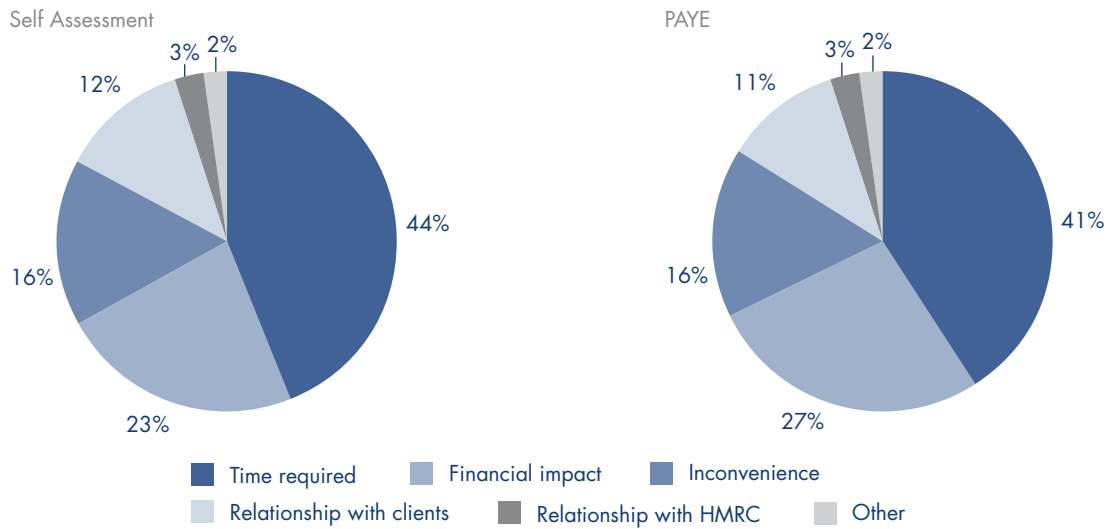
PAYE



- Error in coding
- HMRC inputting information incorrectly
- Incorrect tax calculation
- Other
- Tax calculation not issued
- Incorrect repayments
- Balancing payments incorrect

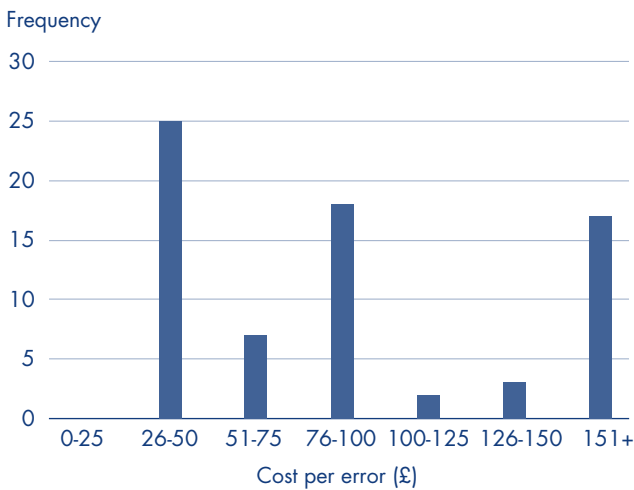
Impact of errors

Question: What are the main consequences of errors (for the taxpayer and for the agent) in processing Self Assessment and PAYE?

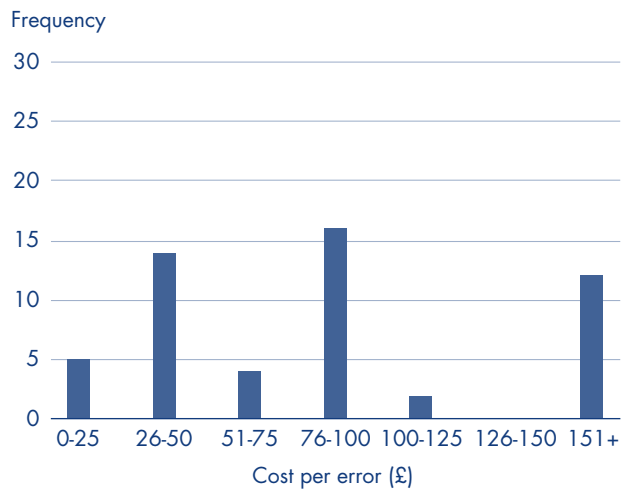


Question: If possible, can you quantify the impacts on the taxpayer and agent in terms of financial cost per error? (White space answer)

Cost per error to the taxpayer

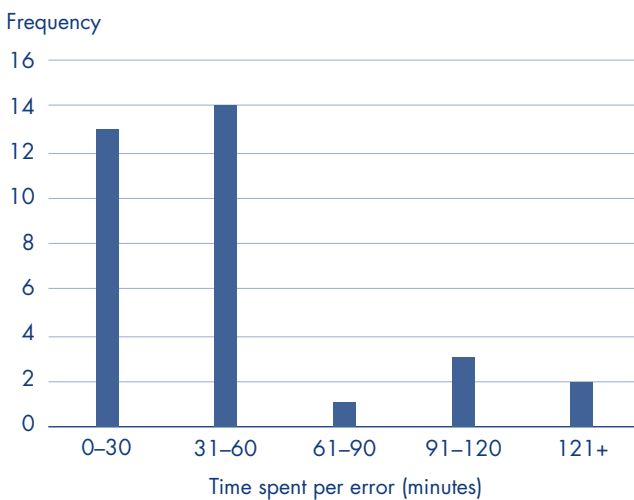


Cost per error to the agent

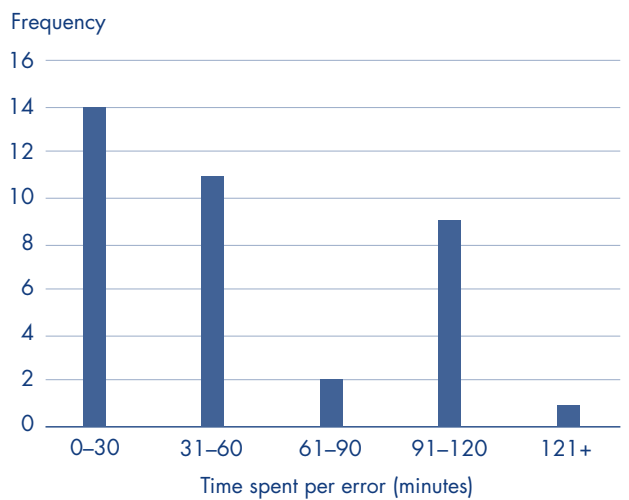


Question: If possible, can you quantify the impacts on the taxpayer and agent in terms of time spent per error? (White space answer)

Time spent resolving errors – Taxpayers (estimate per error)

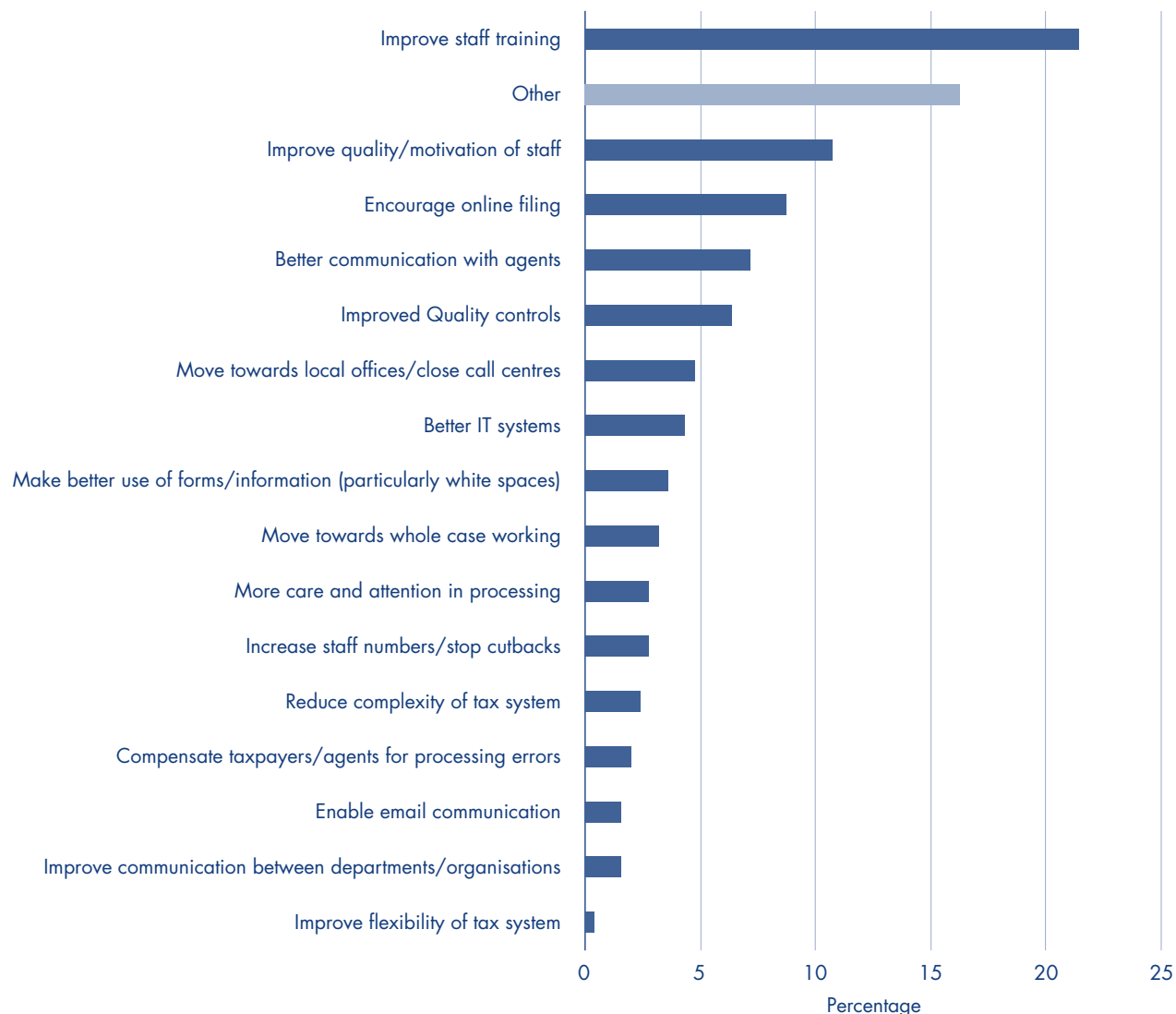


Time spent resolving errors – Agents (estimate per error)



Improvements

Question: Do you have any recommendations on how HM Revenue & Customs might improve its accuracy of processing Self Assessment and PAYE and reduce the burden of errors on taxpayers/agents? (White space answer)



APPENDIX FOUR

Econometric analysis

Objective

1 Europe Economics was commissioned by the National Audit Office to conduct an econometric analysis of trends in the accuracy of processing Income Tax, and factors that may contribute to different levels of performance. The analysis was based on data on accuracy rates and staffing levels collected by HM Revenue & Customs, who also provided assistance interpreting the information.

Methodology and data

2 Europe Economics carried out econometric analysis to estimate the effects of various possible factors on accuracy rates in income tax processing. In particular, estimating the relationship between accuracy rates over time and in individual offices and a range of other explanatory variables such as workload, levels of staff training and sickness absence and the introduction of Lean working.¹³

3 The overall accuracy rate for both Self Assessment and PAYE was used as the main dependent variable. The overall accuracy rate can be broken down into component

parts of the process with accuracy levels for each. The effects of the explanatory variables on these separate component elements for Self Assessment and PAYE were also explored.

4 HM Revenue & Customs provided the relevant datasets to carry out the analysis. The datasets were large enough to identify the relative effect of different factors on accuracy rates. Larger datasets, for example the availability of monthly data for a longer period, would have provided more robust indications of the causes of inaccuracy.

5 The dataset used for the monthly analysis included April 2006-November 2006 for Self Assessment and April 2006-September 2006 for PAYE. Overall accuracy rates rather than accuracy rates for different components (**Figure 23**) were used for this analysis.

6 Europe Economics considered which econometric techniques would be most suitable to use by using statistical tests to determine the most appropriate method. The techniques used in each case are shown in **Figures 25, 26 and 27 on pages 40 and 41**.

¹³ The models were of the general form: $Y_{i,t} = \alpha + \beta X' + u_i + v_{i,t}$, where the dependent variable $Y_{i,t}$ is the accuracy rate and X is a vector of variables, u_i is an area individual effect and $v_{i,t}$ is the usual disturbance or noise term. The vector X includes the explanatory variables in Figure 24.

23 Elements contributing towards overall accuracy rates for Self Assessment and PAYE

Variable	Definition	SA or PAYE	Availability
Incorrect tax code (current year)	Tax code relating to the financial year in question is incorrect.	PAYE	2004-05 to 2006-07
Incorrect tax code (following year)	Tax code relating to the financial year after that in question is incorrect.	PAYE	2004-05 to 2006-07
Previous year's tax debt incorrectly closed	Case declared as closed for the tax year preceding that in question without fully resolving all discrepancies and queries.	PAYE	2004-05 to 2006-07
Tax calculation incorrect or not issued	Revised tax calculation either incorrect or not issued when required.	PAYE	2004-05 to 2006-07
Incorrect repayments issued	Refunds of overpayments inaccurate.	PAYE	2004-05 to 2006-07
Information captured incorrectly	Information from the completed Self Assessment return captured incorrectly when processed by the Department.	SA	2005-06 and 2006-07
Incorrect or missed repairs	Failure to accurately repair all obvious mistakes made by the customer on their SA Return.	SA	2005-06 and 2006-07
Balancing payments calculated incorrectly	Incorrect tax bills or refunds sent by the Department to the taxpayer.	SA	2005-06 and 2006-07

24 Independent variables for analysis

Independent variable	Same data for SA/PAYE?	Availability
Volume of work	Separate	2004-05, 2005-06 and 2006-07
Hours/days devoted to training	Same	2004-05, 2005-06 and 2006-07
Days off for sickness	Same	2004-05, 2005-06 and 2006-07
Whether the office is in an urban or mixed area	Same	2004-05, 2005-06 and 2006-07
Whether the office is a Large Processing Office or Distributed Processing Office	Separate	2004-05, 2005-06 and 2006-07
Focused clearances (those aimed at clearing a specific area of work)	Same	2004-05, 2005-06 and 2006-07 (not available for monthly analysis)
Numbers of new staff	Same	2004-05, 2005-06 and 2006-07
Numbers of staff leaving	Same	2004-05, 2005-06 and 2006-07
Number of staff	Same	2004-05, 2005-06 and 2006-07
Planned volume of work	Separate	2004-05, 2005-06 and 2006-07
When Lean working was introduced to the office	Same	2004-05, 2005-06 and 2006-07

Results

Self-Assessment

25 Results of the analysis for accuracy in processing Self Assessment cases

Model for Self Assessment	Results	Methodology
Overall accuracy (annual data)	<p>Number of training days is significant (positive relationship to accuracy).</p> <p>Number of sick days is significant (negative relationship to accuracy).</p> <p>Higher accuracy rates in rural or mixed location offices than in urban offices.</p> <p>Number of tasks performed by processing staff has no significant effect.</p>	Pooled regression
Accuracy of capturing taxpayer data (annual data)	Limited evidence of the number of tasks being significant (negative relationship to accuracy).	Pooled regression
Accuracy of making amendments to taxpayer data (annual data)	<p>Number of training days is significant (positive relationship to accuracy). Training has the strongest effect on accuracy.</p> <p>Number of sick days is significant (negative relationship to accuracy).</p>	Pooled regression
Accuracy of coding of balancing payments (annual data)	None of the factors has a significant effect.	Mundlak regression
Overall accuracy (monthly data)	<p>Number of leavers has the most significant effect (negative relationship to accuracy).</p> <p>Higher accuracy rates in rural or mixed location offices than in urban offices.</p> <p>Limited evidence that the number of sick days is significant (negative relationship to accuracy).</p> <p>Training has no significant effect.</p> <p>Number of tasks has no significant effect.</p>	Tobit regression

PAYE

26 Results of the analysis for accuracy in processing PAYE cases

Model for PAYE	Results	Methodology
Overall accuracy (annual data)	Number of tasks performed by processing staff has no significant effect. Higher accuracy rates in rural or mixed location offices than in urban offices.	Pooled regression
Accuracy of allocating tax code for the current year (annual data)	Higher accuracy rates in rural or mixed location offices than in urban offices. Number of total leavers is mildly significant (positive relationship to accuracy).	Pooled regression
Accuracy of allocating tax code for the following year (annual data)	Number of sick days is significant (negative relationship to accuracy). Higher accuracy rates in rural or mixed location offices than in urban offices. The number of entrants/leavers is weakly significant (positive relationship to accuracy).	Pooled regression
Accuracy of allocating tax code for the previous year(annual data)	Training is significant (positive relationship to accuracy). Sick days are significant (negative relationship to accuracy). Higher accuracy rates in smaller offices than Large Processing Offices.	Pooled regression
Accuracy of tax calculation (annual data)	The headcount of temporary staff is significant (negative relationship to accuracy). The number of total leavers is weakly significant (positive relationship to accuracy).	Pooled regression
Payable orders (annual data)	None of the factors has a significant effect.	Mundlak regression
Overall accuracy (monthly data)	Number of tasks performed is not significant. Number of leavers is significant (positive relationship to accuracy).	Mundlak regression

The introduction of Lean in processing Self Assessment and PAYE

27 Results of the analysis for the effect of the introduction of Lean on accuracy in processing Self Assessment and PAYE cases

Accuracy model	Results	Methodology
SA overall accuracy (monthly data)	The introduction of Lean has no significant effect but there is some evidence of a positive relationship to accuracy.	Tobit regression
PAYE overall accuracy (monthly data)	The introduction of Lean is significant (negative relationship to accuracy).	Mundlak regression

APPENDIX FIVE

Monitoring of Lean performance

Explanation of measures

The Department monitors the performance of Lean in four key processing areas:

- Processing Self Assessment returns.
- Dealing with all notifications of change of employment (PAYE).
- Post (mail received).
- Manually worked PAYE cases.

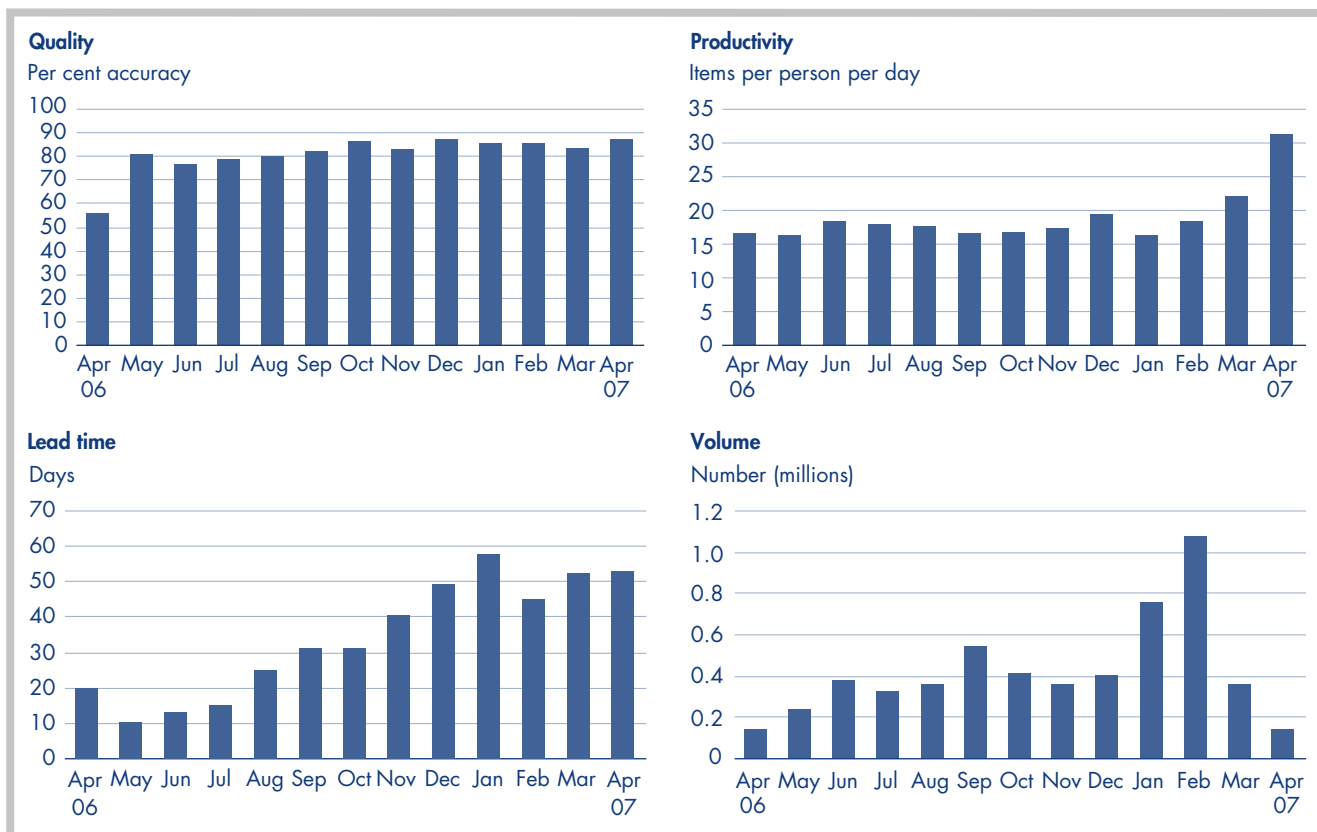
Each is measured by:

- Quality – percentage accuracy including all types of error, not just tax effect.
- Productivity – items completed per person per day.
- Lead time – the number of days between receiving and processing information.

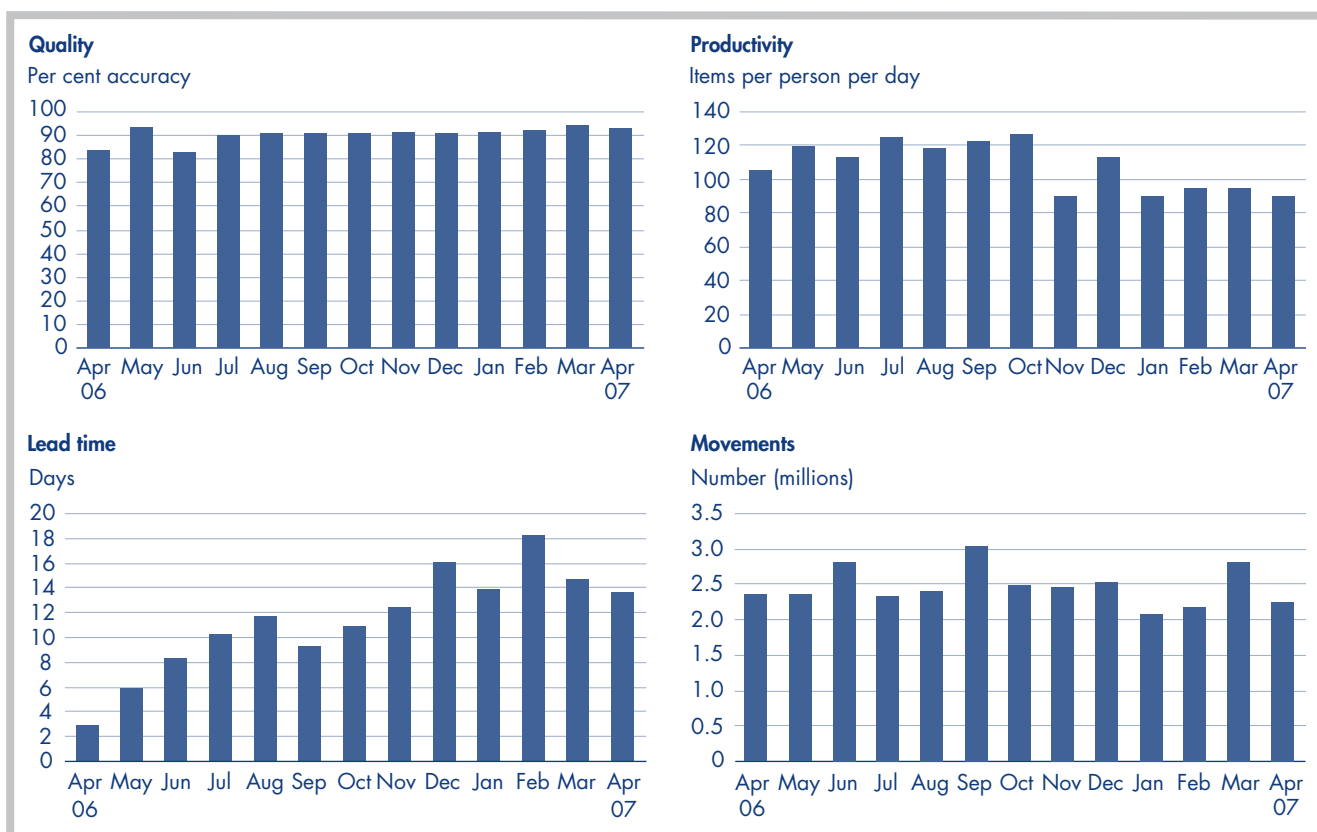
Only quality and productivity are monitored for manually worked PAYE cases.

The results below show the consolidated position of all Lean areas. Volumes are also logged to help explain trends. In the case of dealing with notifications of change of employment, volumes are recorded as 'movements'.

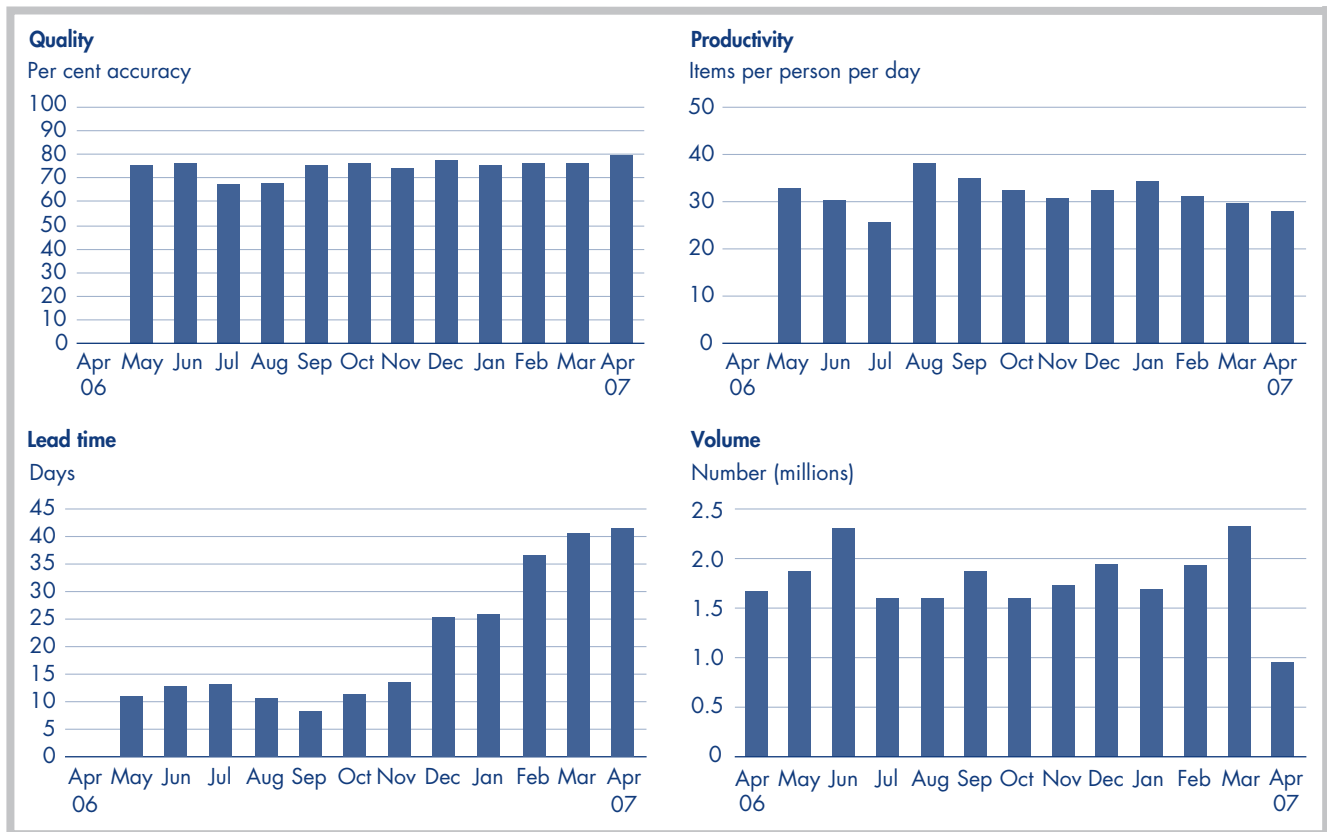
Overview of performance measures for processing Self Assessment



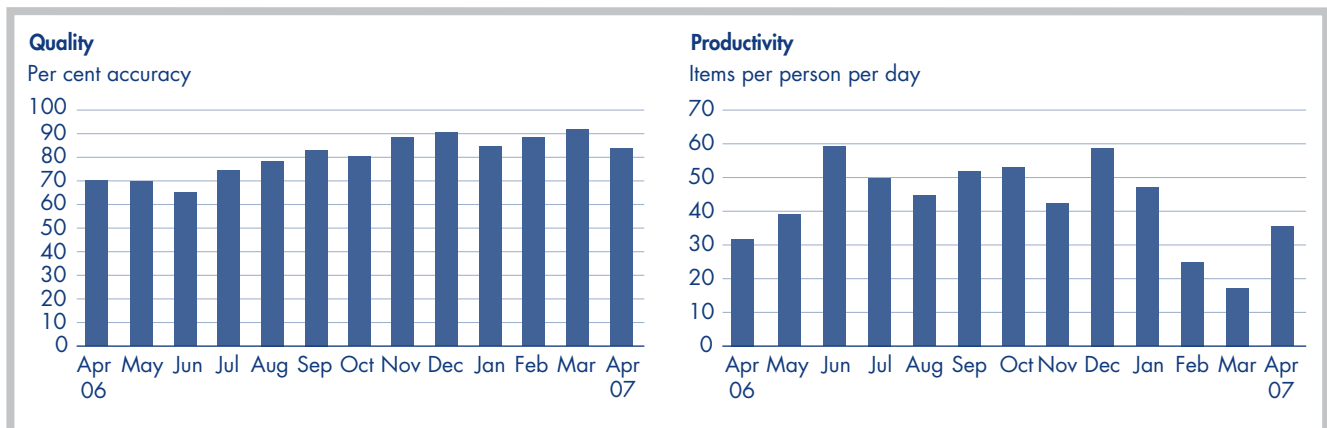
Overview performance measures for dealing with notifications of change of employment (PAYE)



Overview of performance measures for Post



Overview of performance measures for manually worked PAYE cases



APPENDIX SIX

Benchmarking – case studies

Organisation	Issue	Key features
Major Retail Bank	Errors on customer applications causing delays in approving loans	<p>Approach:</p> <ul style="list-style-type: none"> ■ Establish causes of errors and delays. ■ Engage stakeholders with senior managers acting as champions and arbiters. ■ Managers and staff involved in the changes and also to understand benefits and requirements. ■ Support set up for staff impacted by changes and resulting efficiencies. ■ Implement robust project management to progress and sustain changes. <p>Key Process Changes:</p> <ul style="list-style-type: none"> ■ Simplification of application process to reduce number of steps and duplication of customer information. ■ Reduce number of forms and processing handover stages. ■ Redesign forms to be more intuitive highlighting area that requires specific customer action, e.g. signature, etc. ■ Colour code forms to identify missing documents and to track progress. ■ Streamline internal tasks so validation and basic approval is done at local level so that requests for additional customer documentation can be dealt with more immediately. <p>Key Technology Changes:</p> <ul style="list-style-type: none"> ■ Integration of customer databases to ensure consistency of client data. ■ Use of IT systems to spell check entries and implement validation rules against client database. ■ IT systems perform data integrity test and identify high risk loan applications.
International Plastics Manufacture	Errors on invoices created reworking, cashflow issues and negative customer reaction, poor customer service	<p>Approach:</p> <ul style="list-style-type: none"> ■ Involve stakeholders and staff by interaction with the changes so they understand benefits and requirements. ■ Using rigorous quantitative root cause analysis to understand the problems and formulate the required improvements and simplifications. ■ Implement separate performance improvement projects addressing root causes. ■ Use IT system to cleanse customer data and update prices. ■ Update IT system to handle complex customer orders, dispatch and invoicing. ■ Provide sustained training programme on changes made and standards. ■ Implement feedback system using performance dashboard to visualise performance and sustain improvements. ■ Create culture of continual improvement and accountability.

Organisation	Issue	Key features
Insurance Company	Processing time for insurance applications and level of manual interventions was causing delays in approvals and potential impact on reputation and market share	<p>Approach:</p> <ul style="list-style-type: none"> ■ Identify bottlenecks for workflow. ■ Engage stakeholders and staff by extensive communication exercise so they understand benefits and requirements. ■ Involve both managers and staff in the development process. ■ Test and verify new processes to establish support for the solutions. ■ Eliminate manual workarounds by developing IT routines. ■ Off-line testing and proving of procedures to build confidence in the solutions. ■ Update IT systems to match files to the correct policy holder in the client database and perform data integrity test to prevent mistakes.
Financial Services Company	Variability in processing times and substantial rework due to high error rates	<p>Approach:</p> <ul style="list-style-type: none"> ■ Continuous flow processing. ■ Locating linked processes near to each other. ■ Standardising procedures. ■ Eliminating loop-backs. ■ Segregating complexity. ■ Setting process goals and a common rhythm determined by customer demand. ■ Posting performance results. ■ Measuring process time from customer's perspective.
Tax Authority	Implementation of comprehensive measures to monitor quality	<ul style="list-style-type: none"> ■ Implement set of business performance measures based on balanced scorecard moving from 'review and report' to 'analyse and improve'. ■ Continuous monitoring of revised performance measures allowed the identification of small process improvements and feedback to employees on performance and errors. ■ Introduce satisfaction surveys for both employees and customers. ■ Engage stakeholders and staff by extensive communication exercise so they understand benefits and requirements. ■ Existing culture of performance targets contributed to ease of acceptance of balanced scorecard solution. ■ Main driver of performance improvements and reduction in error rates was increase in electronic filing of tax returns which allowed automated processing.
Tax Authority	Delays in processing taxpayer information and work backlogs giving rise to falling quality of assessments	<ul style="list-style-type: none"> ■ Establish causes of errors and delays. ■ Engage stakeholders with senior managers acting as champions and arbiters. ■ Managers and staff involved in the changes and also to understand benefits and requirements. ■ Moved away from centralised data capture to whole case processing by single case worker. ■ Case working improved knowledge of employees who were able to make qualified decisions and developed sense of accountability. ■ Use of IT systems to perform routine validations and correct errors immediately. ■ Adopt balanced performance and quality measures to evaluate effectiveness and use of resources.