# **Article**

Symposium 2008:

Data Collection: Challenges, Achievements and New Directions

# Measuring Respondent Burden in the UK Office for National Statistics



by Denise Williams, Sarah Green and Jacqui Jones

2009



Statistique Canada



# Measuring Respondent Burden in the UK Office for National Statistics

Denise Williams, Sarah Green and Jacqui Jones<sup>1</sup>

#### **Abstract**

The Office for National Statistics (ONS) has an obligation to measure and annually report on the burden that it places on businesses participating in its surveys. There are also targets for reduction of costs to businesses complying with government regulation as part of the 2005 Administrative Burdens Reduction Project (ABRP) coordinated by the Better Regulation Executive (BRE).

Respondent burden is measured by looking at the economic costs to businesses. Over time the methodology for measuring this economic cost has changed with the most recent method being the development and piloting of a Standard Cost Model (SCM) approach.

The SCM is commonly used in Europe and is focused on measuring objective administrative burdens for all government requests for information e.g. tax returns, VAT, as well as survey participation. This method was not therefore specifically developed to measure statistical response burden. The SCM methodology is activity-based, meaning that the costs and time taken to fulfil requirements are broken down by activity.

The SCM approach generally collects data using face-to-face interviews. The approach is therefore labour intensive both from a collection and analysis perspective but provides in depth information. The approach developed and piloted at ONS uses paper self-completion questionnaires.

The objective of this paper is to provide an overview of respondent burden reporting and targets; and to review the different methodologies that ONS has used to measure respondent burden from the perspectives of sampling, data collection, analysis and usability.

# 1. Introduction to paper

For the purpose of this paper we will refer to administrative burden costs as respondent burden. This paper briefly describes the obligations placed on UK government departments to ensure surveys are conducted only when the need has been assessed, and that respondent burden is monitored as highlighted under the guidance of the Prime Minister's (PM's) instructions on 'Control of Statistical Surveys' The paper summarises the existing ONS methodology used to measure response burden costs and the new ONS quantitative approach to the Standard Cost Model (SCM) which is currently being piloted within ONS during the normal cycle of survey reviews. This paper concludes by discussing the observed differences of the two methodologies using analysis from the Capital Expenditure survey.

# 2. Background

Survey Control Unit (SCU) was first established in 1969 and is the guardian of the Prime Minister's (PM's) instructions on the control of statistical surveys. At this point, all government departments were "invited to consider its views on the questionnaire-filling implications of any new and existing enquiry". The PM's instructions on survey control (then in the form of a "minute") were first issued in 1972 to tighten up the existing procedures and to give SCU power to "veto surveys not meeting with its approval". They provided and still provide a framework for managing the response burden placed on both businesses and local authorities.

<sup>&</sup>lt;sup>1</sup> Denise Williams, Sarah Green and Jacqui Jones, UK Office for National Statistics

SCU under the auspices of the PM's instructions, place particular emphasis on ensuring that:

- response burden is clearly identified;
- > new survey proposals are clearly justified;
- alternative sources are thoroughly examined
- regular surveys are subject to periodic review.

# 2.1 Scope of survey controls

Survey controls apply to all statistical surveys of businesses and local authorities, conducted by, or on behalf of, UK government departments or agencies where there is potentially a burden, or a perceived burden, on those approached to participate. This includes both regular and ad hoc surveys; both voluntary and statutory surveys. Surveys conducted by, or on behalf of, non-departmental public bodies are also covered. Such bodies report through, or combined with, parent departments.

# 3. Existing methodology

The response burden costs are currently obtained during the survey review cycle, as specified in the PM's instructions. For example, annual (or less frequent) surveys must be reviewed at least every five years; more frequent surveys must be reviewed at least every three years, quinquennial and triennial reviews respectively. These reviews also include a brief justification for their continuation, feedback from users of the data, and feedback from respondents regarding questionnaire filling obligations.

# 3.1 Existing ONS method of estimating response burden costs

ONS currently measures response burden costs as essentially:

(number of questionnaires sent) x (estimated completion time) x (an appropriate hourly rate)

The completion time and appropriate hourly rate are obtained by sending a questionnaire to a sub-sample of survey respondents during a triennial/quinquennial review. Time-to-complete is based on the median value for all respondents to the review questionnaire. Hourly rate is based on modal value for all respondents to the review questionnaire. There are five possible hourly rates (ranging from "Director" to "Clerk"). The hourly rates are based on civil service "full economic" pay rates and up-rated each year based on the Annual Salaries and Hourly Earnings inflation rate (ASHE).

In ONS, there is some up-rating of the basic burden calculation for time spent re-contacting respondents to check figures. The basis of this calculation has been recognised as fairly weak, but is currently undergoing additional analysis.

The ONS method assumes 100% response rates (hence: "number of questionnaires sent" in the calculation).

#### 4. The Standard Cost Model (SCM)

The Standard Cost Model (SCM) was chosen as the common approach to be used by the European member states. The SCM is considered to provide transparent measurements that are ideal when trying to simplify legislation and lessen the administrative burdens. The common model also allows for a methodical analysis of administrative burdens within each country. This approach highlights areas that require more focus. One of the benefits highlighted for use of this model is the ability to draw attention to the impact of legislation internationally, especially EU-regulation. It was considered that these insights

would make it possible to make joint efforts towards reducing the burdens of such legislation. (The Administrative Burden Declaration June 2004)

In line with the Administrative Burden Reduction Project (ABRP) objective to measure and reduce the administrative burden in all government departments, an initial SCM cost measurement exercise was undertaken to provide, by February 2006, a baseline measurement of costs to business associated with compliance to regulations.

The 'baseline measurement' was carried out by a consultancy company, Price Waterhouse Cooper (PWC), who specialise in measuring administrative burdens. PWC undertook this work on behalf of UK government departments, with the exception of Her Majesty's Revenue and Customs (HMRC) who used a different firm which were more familiar with the nuances of their work.

Measuring the burdens was performed by carrying out in-depth interviews with a small number of businesses. The sample consisted of businesses of varying types and sizes within the target group. Businesses were asked to state how much time and money they spent, performing each administrative activity for each information obligation.

Based on the data collected during the interviews, a subsequent standardisation of the time and money spent performing each administrative activity, was carried out. The standardisation gave a representative figure of the costs incurred by a normally effective business within each segment. A normally effective business is described as a company within the target group that handles its administrative tasks in an ordinary way. In other words the enterprise does not handle its tasks better or worse than could be expected.

The Administrative Burden Declaration 'A common approach open to everyone' stated that:

"To measure the Administrative Burden Costs using the SCM, requires an understanding of the total burden placed on businesses when complying with their obligations. For example, what activity is required when meeting each information obligation required by law. The total administrative burden of a law is the sum of the cost of all information obligations in that law. To measure the administrative burdens of one information obligation you have to subdivide it into administrative activities for each request/variable. The cost of one single information obligation equals the sum of the cost of all the related administrative activities that are necessary to perform in order to fulfil that single information obligation. Administrative activities are the different types of actions, which businesses have to carry out either by themselves, or by consultants, in order to fulfil the information obligation. (The Administrative Burden Declaration June 2004)

The formula for measuring SCM administrative burdens (AB) is as follows:

Total AB per Law = 
$$\Sigma C_{10}$$

--> C<sub>10</sub>: cost of a single information obligation

$$C_{10} = \Sigma C_{00}$$

--> C<sub>00</sub>: cost of a single administrative activity

$$C_{00}$$
 = Price \* Quantity

Each administrative activity is a function of the internal and external costs to business multiplied by the number of times each business has to perform the activity and the total number of businesses who have to perform the activity.

Price = tariff\*time

- -->Tariff: hourly costs to carry out the administrative activity
- -->Time: time taken to carry out a certain administrative activity

Quantity = number of enterprises \* frequency

- --> Number of enterprises: enterprises affected by the particular legislation
- --> Frequency: the number of times a year the activity is carried out by an enterprise

Statistical surveys accounted for only a fraction of the overall costs to businesses of complying with government regulations. These costs can nevertheless be perceived as large by some businesses and therefore, deserve attention. Controlling surveys is an important part of achieving the Government's overall aim of reducing the administrative burdens faced by business.

Following the baseline measurement exercise ONS decided that the qualitative SCM approach was not feasible to implement as part of the survey review cycle, a quantitative SCM approach has therefore been developed.

# 5. Comparison of the qualitative and quantitative SCM approaches

A comparison of the qualitative SCM approach, initially developed by Statistics Netherlands and the ONS existing quantitative approach to cost measurement found both similarities and inconsistencies between the two methods.

The qualitative and quantitative approaches are based on the same principle of measuring costs for a normally efficient business. In both cases the aim is to limit costs to the administrative burden, which is costs associated with response burden over and above the administrative costs of normal business activity. Both approaches obtain information on time taken to comply with the regulation requirement and respondent costs and used this to estimate response burden for a typical (normally efficient) business. Information on population totals is then used to derive total population burden. Both methods provide a breakdown of costs on the basis of business size and also collect additional information on areas of difficulty businesses have in complying with requirements.

Key differences between the methods include:

# Design

The quantitative costs measurement is derived based on information gathered for a random sample of respondents, that is it provides statistically representative measurements. The qualitative approach is based on a pragmatic approach to measurement and provides indicative estimates only.

#### Mode of Collection

A paper self-completion questionnaire is used to collect data for the quantitative costs measurement. In contrast data for the qualitative approach is collected via a small numbers of face to face interviews or alternatively use time consumptions estimated by means of expert assessment.

#### Level of Detail

The quantitative approach collects data on total time to complete a survey response (where the total should cover all associated activities). The qualitative approach breaks down each information obligation covered into detailed data requirements and associated administrative activities. Costs and timings are gathered at this detailed level.

# **5.1** Coverage

Qualitative approach:

- Both anticipated (ex-ante) and incurred (ex-post) costs are included in the cost measurement.
- One-off costs associated with complying with new or amended regulations/legislation are measured in connection with ex-ante measurement.
- Recurring costs are measured in association with both ex-ante and ex-post costs.
- Both statutory and voluntary regulations are included.

The quantitative response cost measurement focuses on ex-post costs but the number of new surveys introduced is limited and therefore, the impact of excluding ex-ante costs will be minimal. The impact on response burden of changes to legislation is identified via the updating of response burden costs during the regular programme of survey reviews. Response burden for both statutory and voluntary surveys is included in the total response burden cost estimates.

# 5.2 Process

Qualitative approach:

- For each regulation associated information obligations obligations to provide data to the public sector are defined.
- Data requirements associated with meeting the information obligation are identified. Such data requirements are systematically categorised in terms of both process and content.
- For each data requirement associated administrative activities are analysed including relevant cost parameters. Cost parameters are categorised as internal, external or acquisitions.
- Information is gathered by means of face to face interviews, group consultation and use of experts.

The quantitative approach, collects data on the total time associated with provision of a survey return, that is there is no identification of individual data requirements (which could be thought of as individual questions or groups of questions) or associated split of administrative activities. Guidance is provided on activities to be covered by the total time estimate (e.g. inclusion of data gathering and collation over and above normal accounting operation, in addition to time for actual questionnaire completion) most of the relevant administrative activities should be covered. There is potentially a risk of some underestimation of costs using this approach, for example training costs or costs associated with creation of IT systems to extract required information from company records may not have been included. Further data requirements/administrative activities are covered when initial timings and costs are increased to include costs of re-contact times using survey specific estimates of the level of re-contact provided by Data Validation Branches within ONS.

In order to change over to the new quantitative approach some further work will be necessary to provide the more detailed breakdown of costs and activities (e.g. identification and categorisation of data requirements).

# 6. Transition

There were two main strands in the project to bring the existing ONS method for measuring response burden in line with the SCM, but using a quantitative approach. Firstly, the existing questionnaire sent to survey respondents has been developed and redesigned by the Data Collection Methodology (DCM) centre of expertise

in the ONS Methodology Directorate, making the data collected match better with that collected under the SCM. Secondly, the revised methodology for calculating response burden based on the quantitative SCM has been developed jointly by SCU and Sample Design and Estimation (SD&E) centre of expertise (also within the ONS Methodology Directorate).

#### **6.1 Data collection mode**

As discussed in section 4, the SCM baseline cost measurement exercise undertaken by PWC relied on face-to face interviews. Given financial constraints, the ONS method will be based on a far less resource intensive quantitative approach using paper self-completion questionnaires. DCM was therefore asked to advise on the appropriate types and order of questions to meet the requirements of the standard cost model.

The PWC exercise also included a specific work-strand on "consulting with experts" (i.e. Trade Associations etc.) to improve the accuracy of their estimates. The quantitative approach developed by ONS does not include this work-strand. It was felt that this work-strand was unnecessary due to the larger sample size of the quantitative approach. As in the past, triennial/quinquennial reviews will (where relevant) seek the views of trade associations and similar groups as part of our 'user' consultations. Such information collected from 'users' help ONS to determine the fitness of purpose of their survey outputs.

# 6.2 Sample design

The key weakness of the SCM qualitative approach was the small sample sizes used to calculate burden: in some cases one or two businesses per survey were interviewed. It is recognised that sample sizes for triennial/quinquennial reviews using the existing methodology have tended to be larger than necessary. Previously where consultation with the experts in SD&E had not taken place, survey review managers were expected to send short questionnaires requesting 'time to complete' and 'staff category' information to 20% of the overall survey sample. A further 20% sub sample would receive a longer questionnaire, requiring additional information about 'costs to the business' and the 'difficulties encountered when completing the main survey questionnaire'.

In line with the new methodology, SD&E developed a method for determining an appropriate sample size for survey reviews. This new method significantly reduces the number of questionnaires previously sent out during each review.

# 6.2.1 Sample sizes

The new methodology includes some investigation of optimal sample size: drawing a balance between some quite large sample sizes used in previous ONS triennial/quinquennial reviews and the small sample sizes used by PWC.

The formula has been derived on the basis that the target parameter to be estimated is the weighted mean response burden cost of completing a questionnaire by a business.

The formula for the required sample size is

$$n = \frac{1}{resp.rate \times \left(\frac{1}{N} + \left(\frac{CV}{R}\right)^{2}\right)}$$

In this formula:

n is the despatch sample size for the review survey

- N is the size of the main survey (that is being reviewed) on any one occasion it is run
- CV is the required coefficient of variation of the estimated mean compliance cost Typically, a figure of 0.10 (i.e., 10%) might be considered reasonable

resp.rate is the anticipated response rate for the review survey

R is the ratio of the standard deviation of costs to the mean cost, of the raw data, i.e. R = sd(y) / mean(y), where y is the compliance cost to a business

From previous ONS experience, a voluntary survey might achieve a response rate of between 0.40 and 0.50 (i.e. 40% to 50%); Empirical evidence (from three review surveys at ONS) suggests that a typical and robust estimate for R might be about 2, once a few large outliers have been removed from the data set. Without their removal, R is likely to be much larger, perhaps reaching 8 or 10. The overall aim is to get the best measure of response burden cost by combining the strengths of the existing ONS method with those of the SCM. In general, the strengths of the ONS method (i.e. sample design and estimation) will be combined with the detailed approach used in the SCM.

#### **6.3. Pilot**

A pilot of the ONS developed SCM paper questionnaire was conducted on nine recent ONS survey reviews, under the normal review cycle. In the past, due to logistical issues, ONS have dispatched the survey review questionnaire separately to the main survey questionnaire and in some cases, several weeks apart. For the pilot, several review questionnaires were dispatched with the main survey questionnaire. Though the burden is ineffect the same, using this method reduces the perceived burden. Jones et al (2005) believe that to calculate burden based on time to complete alone, "is a rather narrow way of measuring response burden and does not take into account factors such as the perceptions of the respondent". The benefit of using this method is twofold: (1), it has shown to have no negative effect on the response rates; in-fact, review managers report an increase in response rates to both the main survey and the review; and (2) the quality of the data; the respondent is not providing information retrospectively

SCU closely monitored the first pilot by meeting regularly with the review managers. These meetings provided the review managers with an opportunity to comment on any issues they had experienced with the developed SCM questionnaire and the data collection tool.

The data collection tool is an excel spreadsheet with preset formulae including the appropriate hourly rates from the Annual Salaries and Hourly Earnings (ASHE) survey, as used by the consultants Price Waterhouse Cooper. This simple data collection tool provided review managers with the basic calculations, and percentages of each variable including breakdowns of activity.

The first pilot proved to be the most important in highlighting required changes to the questionnaire. The newly developed SCM questionnaire contained 17 questions many of these included further breakdowns. A review of the questionnaire also showed that some information could be retrieved from ONS' management information systems so these questions were removed. Whilst still retaining questions on the two different components: internal and external cost, the questionnaire was reduced from 17 to 10 questions. Further to the reduction in questions, the number of questionnaires used during reviews has also decreased from two to only one. Sample sizes will potentially reduce due to the method for sample selection as outlined in section 6.2.

# 6.4 Questionnaire

The questionnaire has been redesigned to address the main acknowledged weakness of the existing ONS methodology, namely that the: "questionnaire did not adequately capture all activities involved in complying

with the regulation". This is not an issue when using the SCM because the main focus of the SCM it to capture activities related to the information obligation performed by each business for each obligation.

The requirements below were the main focus for the redesigned questionnaire:

- breaking down response burden into types of activity.
- including a specific assessment of external costs.
- adjusting for business-as-usual costs using the specific SCM approach.

The final questionnaire addresses all information required for the quantitative SCM. The questionnaire also includes a perceived response burden question as shown below:

Figure 6.4-1
Perceived response burden question

9. What problems did you experience when responding to the <survey name> questionnaire?

For every category you mu	st either 🗙	yes or no
	Yes	No
Had to collect information from different sources	×	×
Needed help from others in order to answer some questions	X	×
Had to wait for information that was available at different times	×	×
Available information did not match the information requested	×	×
Unclear terms and explanations of terms	X	×
Other (please specify below)		

The main change from the existing ONS methodology has been the more detailed breakdowns, which were not previously available.

Total time to complete, question 3, was originally split into two questions, and required a response to each activity, the hours/minutes were collected to quality assure the information provided. However, cognitive testing showed that respondents were either only prepared to complete the hours/minutes boxes, or would miscalculate the time taken for each activity. This would then require further correspondence with the respondent, re-contact with respondents only caused further burden. It was decided to put the two questions as one, as shown below:

# **Figure 6.4-2**

#### **Total time to complete question**

3. What was the total time taken to complete the <survey name> questionnaire?

Please include:

- the time taken to become familiar with the questionnaire
- the time of everyone who helped you to complete the questionnaire
- time spent extracting and preparing information from your systems
- any other time spent in relation to completing the survey

Hours			Minutes		
-------	--	--	---------	--	--

# 6.5 Estimation methodology based on the SCM

A 30% uplift for overheads is applied directly to the respondent's internal costs mirroring the approach for the SCM. Also, a specific uplift for re-contacting businesses is required. Finally the survey frequency needs to be included in the calculation, monthly, quarterly or annually, giving rise to an appropriate multiplication factor (12, 4, or 1 respectively).

The proposed method for the ONS is based on weighting to take account of the stratified sample design. The two variables of interest are the overall survey cost and the weighted mean cost per questionnaire:

- overall survey cost = (sum of the weighted cost per questionnaire\* survey frequency) x an uplift factor for re-contacting businesses.
- mean cost per questionnaire = (sum of the weighted cost per questionnaire / survey sample size) x an uplift factor for re-contacting businesses.

The respondent burden cost is therefore calculated as:

Respondent Burden Cost = (weighted mean cost per questionnaire + uplift for re-contacting businesses) x numberof questionnaires in survey sample x survey frequency

Where:

 $cost\ per\ question naire = [(internal\ cost + overhead\ -\ adjustment\ for\ BAU) + external\ cost]$ which is calculated in the data collection tool.

# 6.5.1 Design weights for the review sample

For any review sample stratum, the design weight is the number of businesses in the main survey sample that each business in the review sample represents. It is calculated as:

$$w_{h_i} = \frac{N_h}{n_{resp,h}}$$

Where:

i

$$h_i$$
 = design weight  
 $i$  = business identifier  
 $h$  = stratum

h = design weight for businesses in review stratum h

Nh = number of units in review stratum h of the main survey sample

nresp,h = number of responding units in review sample stratum h

# 6.5.2 Methodology for calculating the weighted mean response burden per questionnaire

The weighted mean response burden per questionnaire is the average compliance cost of the business that corresponds to the review survey sample, where the review sample design weights are taken into account. This is calculated using the following:

$$weighted mean = \frac{\sum_{i=1}^{n_{resp}} w_{h_i} y_{h_h}}{\sum_{i=1}^{n_{resp}} w_{h_i}}$$

Where:

i = business identifier

h = stratum

 $^{W}h$  = design weight for businesses in review stratum h

 $y_{h_i}$  = compliance cost for businesses in review stratum h

nresp,h = number of responding units in review sample stratum h

That is, for each responding business, the product of the design weight and the value of response burden (y) for that business is first calculated. These values are then summed over the whole responding sample. This is then divided by the design weight for responding business summed over the whole responding sample.

# **6.5.3** Treatment of extreme values (errors and outliers)

The distribution of y tends to be positively skewed. The most extreme values will have a large impact on the estimated total, and therefore it is important that any such values are correct, being representative of the businesses not selected for inclusion in the review sample.

Detection of outliers is conducted by review managers with guidance where needed from SCU. SCU advocate the importance for review managers to validate returned values to ensure that values that are very likely to be incorrect are identified. This may mean re-contacting the respondent if the value of response burden costs appears questionable.

For the small number of values identified as potential outliers these are to be given a weight of 1 in the estimated total and the weights of the other values are adjusted.

# 7. Analysis

When compared to the existing response burden cost method, the quantitative SCM approach is a significant change to the methodology. Some surveys have shown a decrease in response burden costs where others remain similar.

Further analysis shows clearly that the large changes in methodology means that the figures based on the existing compliance cost methodology and those based on the new SCM methodology can not be compared.

SCU has been carrying out analysis in an attempt to understand how the measurements differ. Analysis has highlighted that a number of methodological changes between the methods could be shown to be accounting for the differences, namely:

- the existing methodology uses the Civil Service pay rates while the SCM uses pay rates from the Annual Survey of Hours and Earning (ASHE)
- the business as usual adjustment to internal cost on the SCM is not present in the existing methodology
- different uplifts for overheads used in both

Table 7-1 shows the results of the comparative analysis for the 2007 Capital Expenditure (CapEx) triennial review. It can be seen that the real drivers for the difference in final figures are the 80% uplift for overheads in the existing method, which is not used in the SCM. This is compounded by the reduction for 'business as usual' in the SCM, which isn't applied in the existing compliance methodology.

Table 7-1 Comparison of calculation of figures for the 2007 Capital Expenditure triennial review

Stage	con	Old		Standard st model	Comments
	compliance cost method		cost model method		
Completion time (hours) per questionnaire for an average business		0.50		0.68	OLD: Median completion time (used in method) NEW: Mean completion time (for comparison)
Pay rate applied to survey	£	27.28	£	18.91	OLD: Occupation group spending most time to complete based on Civil Service pay rates NEW: Figure based on proportions of occupations groups time to complete based on ASHE pay rates
Pay rate * time	£	13.64	£	12.86	
Uplifted by 30%	£	17.73	£	16.72	OLD: 30% covers NI and Pensions NEW: 30% covers overheads
Additional uplift by 80%	£	31.92	£	16.72*	80% covers administrative overheads
Reduction for 'business as usual'	£	31.92*	£	4.90	70.7% reduction for an average business for 'business as usual'
Addition of external costs	£	31.92*	£	5.42	52p per average business

<sup>\*</sup> stage not applied

Note: The SCM method actually takes a weighted mean cost per questionnaire which lowers the final figure again, in this example to £4.44.

With the different forms of measurements taking place in the ONS to meet two different requirements i.e. the PM's instructions and the Administrative Burden Reduction Project (ABRP) initiative, difficulties have been highlighted. One measurement concentrates on actual changes to the base line figure. The other measurement concentrates on the cost to a normally efficient business, which is collected during the review cycle. Even though both initial costs where obtained using the standard cost model, the changes to the base line figures rely on different elements of information collected during the review. For example, changes to the base-line figures requires a reduction in the main survey sample, reduction in variables, or a change in the data collection tool etc. ONS are currently looking at how this information can be extracted.

#### 8. Conclusion

This paper provided an overview of work undertaken by ONS Survey Control Unit to address assessment of response burden costs based on a quantitative standard cost methodology. Both the questionnaire and methodology have undergone a complete redesign to bring it in line with the SCM data requirements.

The change to the SCM and the breakdown of administrative activity has seen a reversal of question requirements for example more questions are required to ascertain respondent costs and less on irritants, the most significant reduction has been in the number of questionnaires. Response burden costs can, under the SCM, be achieved with only one type of questionnaire as opposed to the two currently being used. This reduction has a direct effect on the cost of running each review.

The pilot has highlighted that where we could previously accept partially completed returns, and still assess the response burden costs, using the SCM require that the full completion of the questionnaire be fully completed if an assessment is to be made. Using pay rates from the Annual Salary of Hours and Earnings (ASHE) has elevated concerns over the out-of-date pay rates used in the existing methodology and therefore, increased the quality of the data. In terms of effectiveness, by comparison to the existing method the pilot concluded that there was no evidence of diminishing response rates or an increase in the number of complaints from respondents. ONS will continue to evaluate the questionnaire after each round of reviews to ensure its continued usability.

The change to the SCM approach has proved to be a more significant change in terms of the outcome than first envisaged. Analysis clearly shows that the large changes in methodology means that the figures based on the existing response burden cost methodology and those based on the SCM cannot be compared (as shown in Table 7-1). This is mainly due to the change in pay rate; business as usual adjustments; and uplifts for overheads.

The next challenge facing ONS is with the different forms of measurements taking place within the organisation to meet two different requirements i.e. the PM's instructions and the Administrative Burden Reduction Project (ABRP) initiative, difficulties have been highlighted. One measurement concentrates on actual changes to the base line figure. The other measurement concentrates on the cost to a normally efficient business, which is collected during the review cycle. Even though both initial costs where obtained using the standard cost model, the changes to the base line figures rely on different elements of information collected during the review. For example, changes to the base-line figures requires a reduction in the main survey sample, reduction in variables, or a change in the data collection tool etc. ONS are currently looking at how this information can be extracted.

#### References

- Gittins, P. (2007). Proposed New Methodology for 'Estimating Survey Administrative Burden Cost', unpublished report, Office for National Statistics.
- Gittins, P. and Skentlebery, R. (2008). Calculating Administrative Burden for Statistical Surveys using the Standard Cost Model (SCM), unpublished report, Office for National Statistics.
- James, G. (2008). Step by Step Instructions for Conducting Triennial and Quinquennial Reviews 'Sampling Methods', unpublished report, Office for National Statistics.
- Jones, J. et al. (2005). Conceptualising Total Business Survey Burden, Survey Methodology Bulletin, UK Office for National Statistics, 55, 1–10.
- The Administrative Burden (2004). A Common Approach Open to Everyone, 2-6. http://www.administrative-burdens.com