

## Business Crime Scoping Exercise

### Methodological work to consider the scope and feasibility of a new survey to measure commercial victimisation

**Patten Smith and Paul Harvey**  
**Ipsos MORI**

Two national Surveys of Commercial Victimisation (CVS) have previously been carried out by the Home Office (1994 and 2002). The independent Smith review of crime statistics<sup>1</sup> called for regular surveys of commercial and industrial victimisation to supplement measures of victimisation of households and individuals provided by the British Crime Survey. A scoping exercise for a new survey of business crime was therefore commissioned. There were three main components to this work: a review of previous business crime surveys; a series of consultations with Home Office and external stakeholders to identify key survey requirements; and development of survey design options.

The key findings are as follows:

- Previous CVS surveys conducted by the Home Office and the Scottish Government (previously the Scottish Executive) are among the most rigorous of their kind to date. The existing CVS methodology should be retained to provide good

quality data at a reasonable cost and to enable comparisons with previous rounds of the CVS.

- Key stakeholders require up-to-date information on crime experienced by businesses, costs of crime and perceptions of the police response to crime.
- A telephone survey of business premises of all sizes should be conducted. A supplementary survey of head offices should also be considered. The survey questionnaire should be based largely on that used in the 2002 CVS, with modifications to reflect changes in crime patterns and policy priorities.

A new CVS will fill an important gap in data on the nature and extent of crime against businesses, as well as valuable feedback on how retailers view the service they get from the police. This will inform the formulation of sound policy to reduce these crimes.

<sup>1</sup> Smith, A. (2006) *Crime statistics: An independent review*.  
<http://www.homeoffice.gov.uk/rds/pdfs06/crime-statistics-independent-review-06.pdf>

## Contents

|  |    |
|--|----|
| Executive summary  | ii |
| 1. Introduction  | 1  |
| 2. Review of previous business crime surveys               | 1  |
| 3. Objectives of a new survey: input from key stakeholders | 2  |
| 4. Survey development                                      | 7  |
| 5. Options for the new survey                              | 12 |
| Appendices   | 13 |

## Keywords

Business crime  
Commercial Victimisation Survey  
Methodology  
Sampling

*The views expressed in this report are those of the authors, not necessarily those of the Home Office (nor do they reflect Government policy).*

The Research, Development and Statistics Directorate exists to improve policy making, decision taking and practice in support of the Home Office purpose and aims, to provide the public and Parliament with information necessary for informed debate and to publish information for future use.

## Business Crime Scoping Exercise

### Methodological work to consider the scope and feasibility of a new survey to measure commercial victimisation

**Patten Smith and Paul Harvey**  
**Ipsos MORI**

This scoping study examined the feasibility of developing a new survey to measure business crime. The work reviewed Home Office and external stakeholder requirements and presented a set of recommendations for the design and implementation of a new survey of business crime. There were three main components to the work: a literature review of business crime surveys; a series of consultations with Home Office and external stakeholders to identify key survey requirements; and development of survey design options.

#### Review of previous business crime surveys

National and local surveys from both the UK and other countries were reviewed with a view to establishing best practice to date. Most studies suffered from serious methodological shortcomings, notably: use of non-scientific sampling methods; incorrect or no reporting of response rates; and low response rates. The most successful surveys generally used telephone or face-to-face data collection methods. The surveys conducted in the UK by the Home Office and the Scottish Government (previously the Scottish Executive) were amongst the most rigorous conducted in the world to date. Consequently, there are good grounds for retaining the Home Office's existing Commercial Victimisation Survey (CVS) methodology to provide good quality data at a reasonable cost and to enable comparisons with previous rounds of the CVS.

#### Consultation with stakeholders

This involved three elements: interviews with nine external stakeholders to obtain information on the possible use and design of a survey; a workshop with internal research and policy staff to understand the Home Office's core requirements for a survey; and a longer workshop involving

a broader group of external and internal stakeholders to discuss the interim findings. Overall most stakeholders wanted a survey to focus on collecting high quality factual data on the frequency and cost of crime for retail, manufacturing, service, and transport and distribution sectors as well as businesses involved in the 'night-time economy'.

Three general categories of crime and crime-related behaviour to be covered by the survey were agreed: (i) property crime, (ii) violent crime and (iii) anti-social behaviour. Stakeholders also wanted the survey to cover response to crimes and perception measures such as confidence in the police. Also, the survey should be flexible enough to deal with new crimes as they arise and, if possible, enable analysis at very local levels to be carried out. Data should be released quickly after fieldwork in order to ensure that results are timely.

#### Survey design

The authors recommend that a telephone survey of business premises should be conducted biennially and that a supplementary survey of head offices should also be considered. The surveys could cover retail, manufacturing, service, and transport and distribution sectors (excluding public transport) but there is not a clear demand to include public sector organisations, the financial sector or utilities. Premises of all sizes should be included. The optional head office survey should cover head offices of premises in the premises sample that belong to multi-premises organisations. The interviews should take no longer than 25 minutes to complete, within a limited time-frame. The premises interview should be focused on victimisation, crime prevention measures, insurance, local policing, and background information about the business. The head office interview should be focused on cost data.

---

*The views expressed in this report are those of the authors, not necessarily those of the Home Office (nor do they reflect Government policy).*

The Research, Development and Statistics Directorate exists to improve policy making, decision taking and practice in support of the Home Office purpose and aims, to provide the public and Parliament with information necessary for informed debate and to publish information for future use.

The authors recommend that data should be collected by telephone because this represents the most cost-effective method for obtaining data of reasonably high quality. The Experian National Business Database (NBD) should be used as a sampling frame for both premises and enterprises due to its coverage of business telephone numbers.

The sample selection should be designed to include a disproportionately higher number of larger premises/enterprises (i.e. the sample should be disproportionately stratified by size of business) to allow separate analyses to be conducted by employment size group and improve the statistical precision of key survey estimates. In drawing samples for both the premises and head office components of the proposed survey, the authors would also expect to stratify by industry, either proportionately (to reduce sampling variance) or disproportionately (to boost sample sizes for certain industry subgroups). The proposed sample design would easily accommodate both extensions of the survey to Northern Ireland and Scotland, and local boost surveys, if desired.

The authors' initial suggestion is that, if all four sectors discussed with stakeholders are included (retail, manufacturing, services, and transport and distribution), the core premises survey should cover 8,000 premises in total, with 2,000 interviews per sector. This design would deliver confidence intervals of around  $\pm 3.5$  per cent around a 50 per cent estimate in each sector. A sample of this size would also be large enough to allow for a boost of 'night-time economy' premises. The authors also recommend that inclusion of a supplementary sample of 500 head offices of multi-premises organisations should be considered as an option. Before any new survey is implemented, an empirically based feasibility study should be undertaken to check key aspects of survey implementation.

## Business Crime Scoping Exercise

### Methodological work to consider the scope and feasibility of a new survey to measure commercial victimisation

**Patten Smith and Paul Harvey**  
Ipsos MORI

## 1. Introduction

Ipsos MORI was commissioned by the Home Office to undertake a scoping exercise to examine the feasibility of developing a new survey designed to measure business crime. In undertaking this work, Ipsos MORI worked closely with leading UK experts on business crime in the form of the Perpetuity Group and Professor Ken Pease.

The Home Office has conducted two national Commercial Victimisation Surveys (CVS), in 1994 and 2002, and now wishes to consider the possibility of updating the data provided by these. Although the previous surveys covered only populations of small and medium-sized enterprises<sup>2</sup> (SMEs) in the manufacturing and retail sectors, the Home Office is interested in exploring the possibility and feasibility of extending the survey to cover other sectors and larger enterprises and establishments. Any new survey should continue to provide nationally representative sample estimates, and should, as far as possible, provide estimates which are comparable to those provided by the previous CVS surveys.

This work aims to review Home Office and stakeholder requirements for a new survey and to present survey design options and recommendations aimed at meeting these. There were three main components to the work:

1. a literature review;
2. consultation with external stakeholders<sup>3</sup> followed up by workshops with Home Office internal stakeholders and external stakeholders to discuss requirements; and
3. development of survey design options.

These components are discussed in the next three sections. The final section summarises the authors' recommendations and discusses options to be considered by the Home Office before final decisions can be made about the design of a future survey of business crime.

---

## 2. Review of previous business crime surveys

In order to set any proposals for a future survey in an appropriate context, the authors conducted a review of previous surveys of business crime both inside and outside the UK. In particular, they were keen to establish whether other surveys have used innovative methods of which they were unaware, which might be applicable to the proposed survey. The review covered surveys from the UK and other

---

<sup>2</sup> From the technical documentation for these surveys, it appears that the surveys mainly focused on small and medium-sized establishments rather than enterprises, although this is not altogether clear.

---

<sup>3</sup> In-depth interviews were designed to probe in detail experiences of using current sources of data and how a new survey might be designed in order to meet policy or business needs. In particular, the interviews covered stakeholders' perception of the current provision of business crime data, (including which sources of data were used and where stakeholders felt information gaps existed), and what stakeholders would hope to get out of any future data collection exercise (notably in respect of level of reporting unit, geographical area, questionnaire coverage and regularity of data collection required).

---

*The views expressed in this report are those of the authors, not necessarily those of the Home Office (nor do they reflect Government policy).*

The Research, Development and Statistics Directorate exists to improve policy making, decision taking and practice in support of the Home Office purpose and aims, to provide the public and Parliament with information necessary for informed debate and to publish information for future use.

countries and included surveys with both national and local coverage. The individual surveys reviewed are listed and described further in Appendix A.

The methodology of many surveys was poorly documented, but despite this it was clear that the majority suffered serious methodological shortcomings. Most previous business surveys used self-completion questionnaires and consequently tended to have very low response rates – often below 20 per cent. In addition, a number of surveys, including some which appeared to be otherwise methodologically sound such as the earlier CVS surveys, misreported response rates, and others did not report response rates at all. Furthermore, many surveys used non-scientific sampling methods or did not properly report the sampling methods used.

The most methodologically sound surveys, in respect of sampling methods used and response rates obtained, almost invariably used telephone or face-to-face data collection methods. The best of these took place in the UK and comprised: the Small Business and Crime Initiative (SBCI) Survey which successfully interviewed 65 per cent of a good sample of small businesses in two areas of Leicester; the two previous Home Office CVS surveys which obtained response rates that were probably in the order of 50 per cent<sup>4</sup> with well-drawn national samples of business premises using telephone data collection methods; and the Survey of Crimes against Businesses in Scotland which appeared to obtain similar response rates<sup>5</sup> to the CVS surveys amongst a representative sample of premises in Scotland.

The review clearly demonstrated that there is no previously unrecognised methodological ‘magic bullet’ to be found in the wider literature and that the two Home Office surveys were amongst the best conducted to date. Given this, the authors feel that, in considering possible designs for a future survey, the methodology of the previous CVS surveys will provide a good starting point. Other things being equal, they think that there are two specific grounds for retaining the previous CVS methodology:

1. adopting it would provide good quality data at a reasonable cost; and
2. it would enable the Home Office to make comparisons with previous rounds of the CVS with confidence.

---

<sup>4,5</sup> Unfortunately, the technical reports do not allow precise calculation of these.

### 3. Objectives of a new survey: input from key stakeholders

#### Introduction

Having reviewed previous surveys of commercial victimisation, it was important to obtain input from members of organisations and representative bodies who not only would be expected to take part in a future survey, but who also would be users of the resultant data.

Nine stakeholders were interviewed from a range of external organisations<sup>6</sup> to get their view on the possible use and design of a survey. A workshop with internal Home Office research and policy staff was also run to understand the Home Office’s core requirements for a survey. Lastly, a broader group of external and internal stakeholders were invited to a larger workshop to discuss the interim findings from the feasibility study and to address a number of specific survey design requirements (see appendix J for a list of the design questions considered). In the following the authors distil the conclusions from these three consultation exercises.

#### Sources of data currently used and the need for a new survey

External stakeholders felt that the picture of commercial victimisation provided by available data was incomplete, and that for this reason too much reliance had to be placed upon a variety of membership-based surveys carried out by business representative organisations.

*I would say that our survey is a comprehensive survey but it is still of our membership. So it's not a complete picture. We're very well aware of that.*

(British Chambers of Commerce)

Current sources of information were also viewed with scepticism by external stakeholders because they were generally felt to have a narrow sector focus, were in some cases published intermittently, and were delivered using methodologies perceived to be weak and inconsistent. They were, therefore, felt to provide a poor basis for comparisons across sectors and for trend analysis. By way of illustration, a large variation from quarter to quarter was reported in the Association of Convenience Stores’

---

<sup>6</sup> See Appendix B for details of contributors to this phase of the work.

own survey findings, and this is something which they acknowledged called into question the reliability of their data.

External stakeholders also expressed concerns about inconsistency in reporting and under-reporting of crime.

*'... a good example would be some of the surveys we've done in Cheshire. We've got a project where we will look at the crime reported on our electronic crime reports. The store would say, "well actually, no we haven't had any crime in the last 12 months." But ... surveys have all started in five selected stores, where they've had no crime and we've asked the specific question, "have you been verbally abused or assaulted in the last 12 months by somebody trying to buy alcohol from you?" 83 per cent said yes. And yet they hadn't reported any crime.'*

(Co-operative Group)

There was a clear demand from both external and internal stakeholders for a centrally co-ordinated national survey with a wide frame of reference, which serves to establish a national picture of business crime.

*'...from business crime partnerships to the information we can glean from police websites, to government websites, to crime links etc, etc. The lacking bit for us is how it's all co-ordinated. We can go around the country looking at different bits and bobs of data but there doesn't seem to be anybody that is actually corresponding [sic] all this data together.'*

(British Chambers of Commerce)

One reason for wanting reliable data at the national level is that it was felt that this would help stakeholders engage with other bodies which have a focus on Great Britain and Northern Ireland as a whole.

*'We do most of our work nationally, so therefore that's probably the most important to have credible figures that we can rely on, on a national basis. That forms a base for discussion with parliamentarians, the government, political stakeholders, other national bodies and so on. So I think it is very important we have that.'*

(Association of Convenience Stores)

Business stakeholders were generally keen to see linkages with related policy agendas. They were aware that crime against business does not occur in isolation, and were keen to explore links between business crime, crime in general and new policing initiatives.

*'I think something else that should be considered as well is obviously now we are moving towards more neighbourhood policing and local accountability, to have some sort of measurement of that... it would be good to see how successful some of these initiatives have been, especially in terms of public confidence. And I think that any new survey should have that policy element in it as well.'*

(British Retail Consortium)

This was linked to recognition amongst some external stakeholders of their role in engaging with local community and statutory local bodies such as Crime and Disorder Reduction Partnerships (CDRPs) and Community Safety Partnerships (CSPs).

*'Something we've pushed quite hard for is for retail and business to be seen as a fundamental part of the community. And so we'd like to see their problems addressed through strategic assessments that the local authorities are compiling.'*

(British Retail Consortium)

The Home Office stakeholders also regarded a new survey as being an important piece of work which could be used to provide national estimates of the level of crimes against business, which would thereby help inform the development of the Home Office policies aimed at reducing these crimes. In particular it would help the Government: to identify which sectors were having particular problems and enable actions to be taken in relevant sectors; understand businesses' views of the financial and non-financial impact of offending and crime; and collate trend data to understand changes in the profile of business crime.

## Population coverage for any future new survey

### Industrial sectors

There was strong support from both internal and external stakeholders for a new survey of crime against business which was comprehensive in its coverage of different sectors of the economy. Stakeholders generally felt that the areas of retail and manufacturing had been well covered in previous surveys, but although it was acknowledged these are probably the most important sectors for a national survey to monitor, it was felt that other sectors should also be included, as is illustrated in the quote below.

*'Well, I suppose from our point of view because we're a national business organisation and we aren't representative of a particular sector our preference is that it does look into all sectors. There's been a lot of work in terms of retail but manufacturing, I see you mention it was in that survey but it does seem rather limited elsewhere.'*

(British Chambers of Commerce)

While attendees of the initial Home Office stakeholder workshop were keen that the survey should include all industry sectors, they acknowledged that this might not be possible with available resources, and identified four priority sectors as retail, manufacturing, the service sector, and transport and distribution (excluding public transport).

Although the service sector proved difficult for stakeholders to define precisely, in the second workshop a strong desire was expressed that it should cover, and allow for, separate analysis of organisations working in the 'night time economy'. These would include bars, pubs, nightclubs, takeaway restaurants and other food/drink and entertainment venues. There was general agreement in the second workshop that public sector organisations, financial businesses and utility companies should be excluded. Home Office stakeholders in particular were concerned about the feasibility of covering the financial services sector: it was felt that possibly businesses in this sector were very different from those in other sectors of interest in their experiences of crime.

### **Business size**

In general, both external and Home Office stakeholders called for inclusion of the full range of 'sizes' of businesses operating in the economy.

*'I think the problem in the past with the Commercial Victimisation Survey is that it was only SMEs. So it didn't look at some of the larger organisations and I think it should include those as well as the SMEs to see how far across the board the problem actually exists.'*

(Federation of Small Businesses)

Although there were some differences of opinion over the inclusion of 'large' employers, the predominant view expressed in the second workshop with internal and external stakeholders was that they should be included in order to make estimates of national business crime as complete as possible. A strong desire was also expressed by both Home Office and external stakeholders to include smaller employers and the self-employed, largely because they were considered to be most in need of support and most likely to face serious financial consequences from crime.

## **Organisational unit**

There was complete agreement amongst Home Office and external stakeholders that the main survey should cover the population of individual business premises. In the second workshop, stakeholders were asked whether they felt that a supplementary survey of head offices should also be included. The arguments offered for and against their inclusion are summarised in Appendix C. There was no clear division between internal and external stakeholders in views expressed. In general, the prevailing view was that a sample of head offices should be included if possible.

## **Analysis of subgroups**

### **Geography**

For many external stakeholders, having access to business crime data at the local level of analysis was felt to be important – more important than having access to regional level data. While some business-focused stakeholders recognised that being able to examine the local incidence of business-related crime would allow them to make informed investment decisions, external stakeholders generally perceived the main benefits of this kind of analysis as having to do with their ability to engage with local area partners. In this respect, stakeholders particularly mentioned their role in working with CDRPs/ CSPs and informing policing plans and crime maps.

*'When you look at CDRPs...if they were bolstered...that would be important. That really is where the crime is happening on the ground. So for us that would be hugely important and it will fit in with our Chamber network as well. So from our point of view it would give Chambers statistics on the ground and allow them to use that to engage with their local police force.'*

(British Chambers of Commerce)

However, both internal and external stakeholders acknowledged that analyses at very low levels of geography would probably not be possible because they would require prohibitively large and expensive samples. In the absence of this, they accepted that analyses by type of location would still prove very useful. For example, it was hoped that some analyses might focus on types of place, such as the industrial estate, the parade of shops and the high street. For several external stakeholders, analysis of this type was of interest since it reflected the concerns of associated bodies (for instance local authorities) and helped to capture particular types of criminal activity common to that type of place, such as high-street robberies, or the theft of property from industrial units.

*'Obviously from local authorities' perspective it affects them in terms of the recession and things, at the moment they're concentrating on the high street, so obviously anything that impacts on the viability of high street stores is important.'*

(Local Government Association)

It was felt by some external stakeholders that the identification of these operating 'places' might form an initial basis for a more 'intelligence led' approach to the measurement of criminal activity.

*'Well I think intelligence is where you can actually start with an issue...I think from our point of view we'd like to start building up a picture of where the hotspots are for businesses and how to deal with that. If there are sectoral ones that look at industrial estates rather than high streets, you can start working out what are the issues there and how do they differ and how should the reaction from police be different.'*

(British Chambers of Commerce)

Stakeholders varied in how much they wished to be able to analyse by region. Government stakeholders were more interested than business stakeholders in being able to analyse by Government Office Region (GOR). There was also some call from both internal and external stakeholders for the ability to analyse by Police Force Area as it was felt that these data would be helpful to local forces working with businesses on local crime issues. Some external stakeholders mentioned the desirability of being able to analyse data by how urban/rural areas were in which businesses were situated:

*'...but I would say [regional analysis is] less important and obviously it will also need a distinction between urban and rural within those regions.'*

(British Chambers of Commerce)

## Sectors

Both internal and external stakeholders were keen for a new survey to include a broad range of 'top-level' sectors of the economy, while also allowing those representing particular stakeholders to tailor the analysis to the concerns of their particular business. For instance, while crimes within the retail sector were deemed most important by many, for Federation Against Copyright Theft (FACT) it was the relationship of issues of piracy and copyright and their impact on the retail sector which was of interest, while to the Co-operative group it was the issue of agriculture and the retail food business which was of particular interest.

## Accuracy of subgroup estimates

There was an overwhelming view from both internal and external stakeholders that any data should be robust and of high quality. Business organisations in particular wanted to be confident in the results and that subgroups' differences were accurately described before approaching members and others with a view to formulating action plans. Participants in the second workshop agreed that the Home Office should take the lead on acceptable confidence intervals. There was some agreement that a +/- four per cent confidence interval might be appropriate.

## Sample size

No strong views were expressed as to what should be the exact sample size in a future survey. Most stakeholders were concerned that an appropriate balance should be struck between ensuring that the survey would provide robust and reliable data, that it would enable comparisons to be made with previous surveys, and that it would provide value for money.

## Frequency of data collection and timeliness of publication of results

In general there was support amongst both Home Office and external stakeholders for a survey that delivered figures annually, and some external stakeholders suggested that more frequent provision of data might be useful. However, it was accepted that very frequent data collection might not be practical.

*'Well ideally things would be annually but I do recognise that that's not always possible...but I think we want something that is regular, we want something that allows us to see trends. So, as I say, ideally it would be annually but every other year or something would be of use.'*

(British Chambers of Commerce)

Some external stakeholders suggested that collection of data should be done more frequently than annually (either quarterly or biannually), and this was justified in terms of being able to investigate whether there are seasonal trends in the data. However, it was acknowledged in the second workshop that even annual data collection may not be practicable, and the possibility of biennial data collection instead was discussed.



Concern was expressed by external stakeholders at the speed of provision of data: it was felt that the time between data collection and the publishing of figures should be kept as short as possible. This is felt to be important because the new survey should be up to date and capture any emerging trends quickly.

*'All you get from a survey of that kind is a snapshot at that time and if the results, say, are a year later coming out, it's difficult to actually know just how much faith you can put in that as far as any trends are concerned, those trends, I suspect, that are most of interest to our members.'*

(Union of Shop, Distributive and Allied Workers  
(USDAW))

## Required survey content

There was a consensus amongst both Home Office and external stakeholders that a future survey of business crime should directly measure *levels* and *costs* of criminal activity rather than only measure perceptual data. Stakeholders were also generally in agreement that a survey of business crime should be broad in scope and should cover a range of crime and crime-related behaviour types, notably *crime against property*, *violent crime* and *anti-social behaviour*. Stakeholders generally displayed a good level of understanding of the nuances of crime classification and categorisation, and were interested in seeing analyses of specific crime types within the three broad types.<sup>7</sup>

External stakeholders were especially concerned that employers, business groups and interested stakeholders should have enough information to be able to understand comprehensively the extent to which crime against business is an issue and is having an impact on them.

*'What we want to be able to say is that these crimes are affecting businesses and it is prevalent here and what's being done about it. So if we can show that businesses are being targeted in a certain local authority and these are the ways they are being targeted. That's ultimately, that's hugely valuable.'*

(British Chambers of Commerce)

As stated above, it was felt that data should be used to assess both *levels* of crime faced by business and the *costs* of crime to business. It was generally felt that the latter should include more than the *direct* financial costs associated with, say, the loss of a stolen product, or the

cost of replacing a damaged vehicle or storefront, and should also include the broader impact of crimes on business such as loss of trade.

Some external stakeholders expressed significant concerns over e-crime, although this was not of equal interest to all. FACT, in particular, were concerned with downloading crimes against the music and film industries and would like to see the Home Office develop a measurement for this within a future survey. Card fraud was mentioned by a number of external stakeholders, particularly the British Retail Consortium, the Federation of Small Businesses and the British Chambers of Commerce.

Some external stakeholders also suggested that it would be desirable to include some form of measurement of response to crimes such as the number of arrests and/or convictions associated with business crime. They also felt that it would be useful to measure the level of confidence that businesses have regarding how the authorities deal with crime.

*'I think the big one for us that hasn't been covered is the confidence in police and the usability and effectiveness of bodies that exist to engage with business on business crime.'*

(British Chambers of Commerce)

Some external stakeholders also have the view that the survey might help provide an understanding of possible under-reporting of crime by businesses, and how it relates to relationships between the business community and local authorities and the police.

*'The impression we get I think, generally, is that there's a large variation across the country between some parts of the country where there's quite a lot of good work being done and large parts where there's no connection between the business community and CDRPs and where the business community's view of the police is that it's not worth bothering reporting crimes to them because they won't be treated seriously. So anything that could measure the healthiness of that relationship, I think would be quite important.'*

(USDAW)

A number of other potential content areas were identified by stakeholders, although none of these received sufficient endorsement to be considered part of the survey core requirement (see Appendix E).

---

<sup>7</sup> See Appendix D for full list of preferences of crime types.

## 4. Survey development

As the authors see it, the main survey requirements, taken from the stakeholder interviews, have been summarised in Appendix F. This section will discuss key aspects of the survey design in the light of these requirements and, in so doing, work up a set of survey design recommendations.

### Unit of organisation to be sampled

With any survey of organisations or businesses, an important decision needs to be made about the type of unit to be sampled: should it be the enterprise/organisation as a whole, or the local establishment/set of premises? For business crime, it has been coherently argued that information on crime frequency and immediate impact can be only accurately obtained from local premises, whereas information on costs of crime is better collected centrally from head offices.<sup>8</sup> The authors also note that the stakeholder wish for data showing the relationship between local situational factors and levels/types of business crime can only be fulfilled if data are collected from individual sets of premises.

In the light of this, the authors recommend:

1. that a core premises survey similar to the previous Home Office CVS surveys, should be undertaken in order to collect data on victimisation, response to crime and other data that can be related to particular crime events, and also to collect data on local characteristics;
2. that a parallel head office (enterprise) survey should also be considered in order to collect data on the costs of crime.

### Survey population

The authors note that, as a matter of stipulation, any business crime survey is to cover England and Wales only. The major UK surveys of business crime have, to date, limited their coverage to particular industrial sectors, and stakeholders in their interviews indicated that they would like to see the survey cover a broader range of business types. Stakeholders felt that, ideally, the survey should cover the following sectors: retail, manufacturing, the service sector, and transport and distribution (excluding public transport).

<sup>8</sup> See for example, Burrows, Anderson, Bamfield, Hopkins and Ingram (2001). *Crime against businesses in Scotland*, Scottish Executive Central Research Unit.

It should be noted that sectors are defined in terms of Standard Industrial Classification (SIC) codes on all available sampling frames, and it will therefore be necessary to define the survey population using these codes (see Appendix G). The authors note that the previous Home Office survey samples were in the main drawn<sup>9</sup> from the equivalent of two of the 21 sections shown (C and G), whereas the Scottish survey also included sample members from the equivalents of sections F, I, H and J. On the basis of the stakeholder priorities listed in the previous paragraph, the authors feel that there are grounds for including section C, parts of section G, some / all of sections I and K to S, part of section G and part of section H.

A second issue relating to the survey population concerns business size. The authors note that the two previous Home Office surveys covered only SMEs – only those with fewer than 250 employees were included. The view expressed by both stakeholders and Home Office staff was that large organisations should also be included. Stakeholders were also of the view that, in principle, there should also be no lower size limit. It should be noted, however, that very small businesses often operate from their homes rather than separate business premises. These businesses may have risk factors more similar to those relating to private homes than to those relating to business premises, and as such would require a very different interview structure. One way of circumventing this problem might be to exclude small businesses which operated from domestic premises but not those which operated from separate premises.

To summarise, the authors recommend that the survey should cover (i) retail, manufacturing, service, and transport / distribution sectors in whole or in part, and (ii) premises of all sizes, but that businesses operating from domestic premises should be excluded.

### Data collection mode

Careful consideration also needs to be given to the data collection mode. The main available options are: face-to-face interviewing; telephone interviewing; self-completion postal questionnaires; and self-completion web-based questionnaires. These methods differ in: their cost (decreasing as one moves down the list above); possible questionnaire lengths and complexity (in decreasing order: face-to-face interviewing, telephone interviewing, web-based surveys and postal surveys); and response

<sup>9</sup> It should be noted that these surveys (i) used different versions of SIC to define and stratify their samples and (ii) did not sample wholesale premises or all types of manufacturing premises.

rates (greatest for face to face and least for the self-completion methods).

The three major business crime surveys conducted to date in the UK (the two Home Office surveys and the Scottish survey) have used telephone interviews to collect data from premises and have all had acceptable response rates. In contrast, efforts to collect data on costs of crime from head offices in these surveys using postal methods delivered unacceptably low response rates.

None of these surveys used web-based data collection methods, and these might, therefore, be considered to be a viable option. However, the authors have found no evidence in the literature to suggest that response rates from surveys using web-based methods will be higher than those using postal methods. They therefore feel that this option should be rejected.

Given (i) the generally unacceptable response rates associated with self-completion methods, (ii) the need to collect data of substantial quantity and complexity and (iii) the relative costs of telephone and face-to-face data collection methods, the authors recommend that surveys of both premises and head offices should be undertaken by telephone interview using one of the standard Computer-Assisted Telephone Interviewing (CATI) software systems.

## Sample frames

Three databases have reasonably comprehensive coverage of the large business population and might, therefore, be used as sampling frames for surveys of business crime: the Inter-Departmental Business Register (IDBR), the Dun & Bradstreet (D&B) database and the Experian National Business Database (NBD). The frame properties of IDBR are better documented than are those of the other two frames, probably because it is used as the frame of preference by the Office for National Statistics (ONS).

### **The Inter-Departmental Business Register (IDBR)**

The IDBR is a list of UK businesses which is maintained by ONS, and used by the Government for statistical and survey sampling purposes. It is based on three administrative sources: businesses registered for Value Added Tax (VAT); employers operating a Pay As You Earn (PAYE) scheme; and incorporated businesses registered at Companies House. The IDBR covers most businesses, although it does omit some very small ones (notably self-employed workers without employees and with a low turnover) and some non-profit making organisations. It is claimed to give nearly

99 per cent coverage of UK economic activity and is generally regarded as being the most comprehensive and accurate database of businesses in the UK, apart, perhaps, from the very small ones. It can be used to identify and link enterprises and local units, and can be used to draw both head office and premises samples.

IDBR does not have telephone numbers in many instances, although users report that this is improving, and that the matching of phone numbers from other sources is fairly successful with 75 per cent to 80 per cent of numbers typically being successfully matched. However, with these telephone matching levels, sampling coverage for telephone surveys is reduced by some 20-25 per cent. Therefore, although IDBR may well have better coverage of businesses (apart from very small ones) than other frames for face-to-face surveys this may well not be the case for telephone surveys. Use of IDBR as a sampling frame is restricted to ONS and government departments (including their agents). Several weeks need to be allowed for samples drawn from the IDBR.

### **The Dun & Bradstreet database (D&B)**

The D&B database covers businesses listed at Companies House. It is updated regularly and is considered to have better telephone coverage than the IDBR. To the authors' knowledge, no formal checks of D&B's coverage of enterprises have been made. It seems clear, however, that its coverage of establishments/premises is poorer than that of IDBR or Experian.<sup>10</sup>

### **Experian National Business Database (NBD)**

The NBD draws on data from Companies House, Thomson Local Directories and the Yellow Pages Directories. It has good telephone coverage, reflecting its telephone directory sources. It appears to have better coverage of local units than D&B and is, therefore, generally preferred to D&B as a source of samples of these. It is unclear, however, from our investigations as to how successfully the NBD can be used to link premises with head offices. Comparison with IDBR, in terms of number, size and geographical distribution of local units appears to indicate that the Experian database has fairly similar coverage to the IDBR.<sup>11</sup> Because of the different ways in which the two lists are compiled, NBD's coverage of very small businesses may also be better than IDBR's,

---

10 Susan Purdon and William O'Connor (2008) *Methodological Review of Research with Large Businesses Paper 1: Sampling issues*. National Centre for Social Research.

11 Hayward and Nicholls (2005) cited in Purdon and O'Connor (2008). *Methodological Review of Research with Large Businesses Paper 1: Sampling issues*. Prepared for HM Revenue & Customs.

although the authors are not aware of any evidence bearing directly on this question.

In the light of the authors' recommendation to use a telephone data collection methodology, and because it has good telephone coverage properties, the authors recommend using the Experian NBD as a sampling frame both for samples of local units and enterprises. If, as seems likely, NBD's coverage of very small businesses is better than that of IDBR, this would confer a second advantage on using the former list as a sample frame. This recommendation will need to be reviewed, however, in the light of decisions made about inclusion of a head office sample as discussed below.

## Sample design

### Premises and head office surveys

The authors recommend that the survey should cover a core sample of premises, but that allowance should also be made for inclusion of an additional head office sample, and possibly also for inclusion of local boost samples.

The authors note that it should be possible to integrate a head office add-on sample with the premises sample cost-effectively by taking advantage of the fact that the majority of businesses comprise only one set of premises. The premises survey will automatically also cover head offices. The idea would be (i) to administer both premises and head office questionnaires to premises belonging to single premises organisations and (ii) to administer head office questionnaires to a supplementary sample of head offices relating to those sampled premises which belong to multi-premises organisations. The overall head office sample would be formed by combining the single-site premises sample with the supplementary multi-site head office sample.

It should be noted that the success of the integrated approach would depend upon two conditions:

- that in combination the premises and head office components of the questionnaire should not lead to an excessively long interview – the authors would suggest no more than about 25 minutes in total (bearing in mind that there may be considerable overlap in the content of the two questionnaires);
- that the sample frame used for the two surveys should permit accurate identification of both premises and head offices belonging to multi-site organisations.

### Sample stratification

In line with many surveys of businesses and employers it is likely that survey results will vary consistently by size of premises (usually defined in terms of number of employees) in the premises survey and by size of organisation in the head office survey: for example, the two Home Office funded surveys found that crime rates increased with the size of the business establishment. In the light of this, it is advisable to draw a sample in which larger business premises are sampled at higher rates than smaller ones (i.e. the sample will need to be *disproportionately stratified by the size of premises*). For a survey of business crime this type of design has two main advantages over a design in which premises of all sizes have the same probability of inclusion: it allows separate estimates to be obtained for larger establishments as a design which uses equal selection probabilities will deliver too few large premises for this; and for those variables which are correlated with establishment size, such as number of crime incidents and total cost of crime, sample estimates will generally be more precise (i.e. have narrower confidence intervals).

In practice, in drawing a sample for both premises and head office components of the proposed survey, the authors would expect both to stratify disproportionately by number of employees as just discussed, and also to stratify by industry (SIC), either proportionately (to reduce sampling variance)<sup>12</sup> or disproportionately (to allow separate estimates to be made for industrial sectors in which premises would otherwise be sampled in small numbers).

### Sample size

The overall sample size should depend upon the available budget, the number of industrial sectors to be included in the survey population, the types of subgroups for which separate estimates are required, the range of premises/enterprise sizes to be included (because this will affect weighting and hence effective sample size), and the level of precision required for overall and subgroup estimates. That said, the authors would think it likely that the size of the achieved premises sample would be in the range of 2,000-8,000 (if it seeks to include more than one sector).

<sup>12</sup> Reductions in sampling variance (increases in precision) increase with proportionate stratification to the extent that survey variables are associated with the stratifier used. This condition is certainly satisfied for some survey variables: the authors know, for example, that the amount of crime experienced by premises correlates with the premises SIC code.

The authors note that some stakeholders would like to see analysis at very low levels of geography. To be able to achieve this nationally would require a very large sample indeed, and the authors assume that this possibility would not be countenanced for reasons of both cost and practicality (survey agencies would not have the capacity to undertake such a large survey). However, if estimates were desired for particular localities, it would be perfectly feasible to adapt the proposed sample design to include local boost samples.

The authors recommend that: the survey should cover a core sample of premises, but that allowance should also be made for inclusion of an additional head office sample; the premises sample should be disproportionately stratified by size and stratified proportionately or disproportionately by SIC; and the sample size should be in the range of 2,000-8,000 interviews (depending on the number of sectors included).

## Data collection procedures and response rates

Nowadays, something approaching a standard practice has evolved for telephone surveys of businesses in the UK, and this is reflected in the procedures adopted for the two Home Office premises surveys and for the Scottish premises survey. In summary, these procedures are as follows: an initial phone call to check eligibility and to identify an appropriate individual to act as respondent; despatch of a personalised letter and a data sheet to collect preliminary data; a further telephone call to make an appointment for interview and to confirm whom the respondent will be; the interview itself; and finally, despatch of a summary of the main findings to those interviewed.

The data sheet<sup>13</sup> is in effect a paper self-completion questionnaire which is limited to a small number of factual data items. It prompts respondents to access documents or databases prior to the interview for details they would be unlikely to hold in their memory. The data sheet and the interview should be closely integrated, in the sense that data sheet questions will be asked again in the interview. This is preferable to asking the respondent to post back the data sheet because (i) it enables data to be electronically checked, and if necessary queried with the respondent, as the interviewer enters each figure and (ii) it reduces the amount of missing data arising from respondents' non-return or poor completion of data

<sup>13</sup> An example of a well-designed data sheet as used on WERS 2004 can be found at:  
<http://www.wers2004.info/wers2004/crosssection.php#docs>

sheets. In order to minimise survey non-response, it is generally recommended that the interview should take no longer than 25 minutes (on average) to complete.<sup>14</sup>

Sufficient time should be allowed for fieldwork if reasonable response rates are to be achieved. Although with telephone surveys large numbers of interviews may be completed in two or three weeks, it is not possible to achieve high response rates in such a short period because this allows insufficient time for following up sampled cases which are hard to contact, slow to provide contact information or for which the selected individual is not immediately available for interview. Indeed, as a result of considerations such as these, one commentator<sup>15</sup> has recommended that at least 12 weeks should be allowed for such a survey; support for this view can be found by consulting technical reports for recent telephone surveys of organisations which obtained response rates of around 60 per cent (or more).<sup>16</sup>

Over recent years response rates have been in decline for surveys of all types,<sup>17</sup> and surveys of businesses appear to have been no exception to this. For example, response rates to the last three implementations of the Employer Pension Provision Survey – a well conducted telephone survey of employers – were 67 per cent in 2003, 63 per cent in 2005 and 56 per cent in 2007.<sup>18</sup> In the light of this, and the authors' knowledge of the response rates obtained in the previous CVS surveys, they would expect the new survey of business to obtain response rates in the order of 55-60 per cent.

In summary, the authors recommend that: the standard practice for telephone surveys of businesses (described above) should be followed for the survey; the interview should take no more than 25 minutes (on average) to administer; and that at least 12 weeks should be allowed for fieldwork.

<sup>14</sup> See, for example, Jon Hales and William O'Connor (2008) *Methodological Review of Research with Large Businesses Paper 3: Data Collection*. National Centre for Social Research.

<sup>15</sup> Hales and O'Connor, *op cit*.

<sup>16</sup> See, for example, the following. John Forth and Lucy Stokes (2008) *Employers' Pension Provision Survey 2007*, Department for Work and Pensions Research Report No 545. Stephen McKay (2006) *Employers' Pension Provision Survey 2005*, Department for Work and Pensions Research Report No 329. Jane Kerr and Clare Tait (2008) *Evaluation of Tax-Advantaged All-Employee Share Schemes*, National Centre for Social Research.

<sup>17</sup> See, for example, Susan Purdon (2006) *Non-Response and Bias - a comparison of NatCen surveys*. Paper presented to RSS, [http://www.rss.org.uk/rssadmin/uploads/390238\\_RSS%20presentation%20-%20SP2.pdf](http://www.rss.org.uk/rssadmin/uploads/390238_RSS%20presentation%20-%20SP2.pdf)

<sup>18</sup> See Forth and Stokes (2008), *op cit*; McKay (2006), *op cit*; Andreas Cebulla and Sandra Reyes De-Beaman (2008), *Employers' Pension Provision Survey 2003*. Department for Work and Pensions Research Report No 207.

## Whom to interview

If accurate data are to be collected in a survey of establishments (premises) or organisations, it is very important to ensure that the person interviewed is also the person who is best placed in the establishment/organisation to answer the survey questions. Of course, there may be no single person who is able to answer all the survey questions, and it is partly to counter this possibility that datasheets are often sent in advance of survey interviews: datasheets can be completed in advance of the interview in consultation with all relevant members of the organisation.

In the 2002 CVS, premises survey interviews were sought with the 'senior person responsible for security issues'. In practice, in smaller organisations this person was the head of security, office manager, owner or proprietor. The authors recommend that this approach be taken for both the premises and head office surveys.

## Questionnaire content

### Premises questionnaire

The authors strongly recommend that the new premises survey should adopt the same basic questionnaire structure as was used for the 2002 CVS. This was in turn based upon the 1994 CVS, but also included a number of changes. The 2002 CVS questionnaire included detailed questions on: types and costs of victimisation and responses to victimisation; insurance and crime prevention measures; local policing; and business characteristics (see Appendix H for a table showing more detailed content).

One major change between 1994 and 2002 involved the introduction of a screener module of questions such that in 2002 respondents were asked whether they had been a victim of (almost) all types of crime before any specific follow-up questions were asked. This approach, long used in the British Crime Survey and recommended in the questionnaire design literature,<sup>19</sup> has two advantages over the 1994 approach: (i) it helps guard against under-reporting arising from respondents saying they had not suffered crimes simply to avoid being asked the follow-up questions and (ii) it improves the flow of the questionnaire and helps respondents make use of their 'experience of

19 See for example, Norman M. Bradburn, Seymour Sudman, Brian Wansink (2004). *Asking Questions: The Definitive Guide To Questionnaire Design - For Market Research, Political Polls, And Social And Health Questionnaires*. Jossey-Bass.

crime sheet'.<sup>20</sup> The authors strongly recommend that this approach should be retained in any future survey.

It is also likely that for a new survey of premises the questionnaire will require modification in order to take account of any increased breadth of sectors covered by the survey, changes in the types of crime afflicting businesses, and changes in policy objectives. The authors suggest that the questionnaire might address the issue of changes in types of crime by including questions about any other crime types affecting each business. If sufficient numbers of crimes of any new type were identified, new direct questions could be incorporated in the following survey round to allow for these new/emerging types.

Stakeholders expressed a wish that the survey should be capable of delivering analyses by type of place (e.g. high streets, industrial estates, etc). This should be readily achievable by including questions on the nature of the local environment surrounding each set of premises. The authors note that questions of this sort were included on the 2002 CVS questionnaire, but suggest that these might be revised so that they better match these stakeholder's wishes. The authors recommend that the premises questionnaire should be based on that used in the 2002 CVS but that modifications should be made to take account of changes in survey coverage, crime patterns and policy, and that a set of place type questions should be developed.

### Head Office questionnaire

This questionnaire will focus upon costs of crime as they relate to the organisation as a whole. It is felt better to collect this information at head office level for multi-site organisations because in such organisations it is often the case that head offices control security and allied operations, and hold data on costs of crime and security measures.<sup>21</sup> Furthermore, it has been argued that head offices will be in a better position than individual premises in multi-site organisations to estimate costs of crimes not directly witnessed.<sup>22</sup> The authors recommend that detailed content of this questionnaire should be worked up in the light of preliminary exploratory interviews with head offices.

20 Jan Shury, Mark Speed, David Vivian, Alistair Kuechel and Sian Nicholas (2005). *Crime against retail and manufacturing premises: findings from the 2002 Commercial Victimisation Survey*. Home Office Online Report 37/05.

21 See for example, Burrows, Anderson, Bamfield, Hopkins and Ingram (2001), op cit.

22 These losses are usually assumed to be a major cause of 'shrinkage', and have sometimes been estimated to be at least as large as losses arising from witnessed crime; see, for example, Burrows, Anderson, Bamfield, Hopkins and Ingram (2001), op cit; British Retail Consortium (2008) *Retail Crime Survey 2007-8*, TSO.

## Weighting data

If the sampling approach recommended here is adopted, data will need to be weighted by design weights in order to avoid sample selection bias. It will also be advisable to apply non-response weights with a view to reducing the biasing impact of differential non-response.

### Design weights

In principle, design weights are simple to calculate: they are set to be inversely proportional to the sample selection probability. In practice, however, technical problems arise when premises/organisations are found during fieldwork to have different characteristics from those they were assumed to have (on the basis of sample frame information) when sampled. Such 'stratum jumping' can lead to considerable variability in the magnitude of weights, which in turn can reduce estimate precision substantially. No standard way of dealing with stratum jumping has been identified in the literature, but various ad hoc solutions have evolved which involve capping large weights. Such capping would be expected to lead to small increases in bias, which, hopefully, will be outweighed by decreases in standard errors.

### Non-response weights

Response rates on quantitative surveys of businesses will never be 100 per cent and are likely to fall well below this. If eligible businesses that do not take part differ from those which do, this non-response will lead to bias in the survey estimates.

It is usual to attempt to reduce this non-response bias by applying weights which align the profile of responding businesses (after design weights are applied) to that of the corresponding survey population on variables which are available for the latter. This will reduce bias for survey variables which are correlated with the variables used for weighting. The most common variables used for this in business surveys are number of employees and SIC group, although, in principle, any variable appearing in the sample frame or for which independent population data are available might be used.

Given that surveys tend to be designed to generate a wide range of statistics, it is usual to base non-response weighting strategies on expert judgement of what appears reasonable rather than on the basis of strict empirical assessment. There is no 'right' approach overall because an approach which works best for one estimate will probably be suboptimal for another. The authors recommend that both design weights and non-response weights be calculated following the standard approaches used in business surveys.

## Extending the survey to Scotland and Northern Ireland

The brief indicates that it may be desirable to extend the fieldwork to Scotland and Northern Ireland. On the face of it, because (i) a telephone data collection methodology and (ii) candidate sample frames have UK wide coverage, this should be simple to implement. If, as seems probable, separate estimates were required for each country, the sample design would require the addition of a further layer of disproportionate stratification (by country), but this would be straightforward to implement.

## Local area boosts

Stakeholders expressed a wish that the survey might be used to deliver estimates at very local levels. Of course, if this were to be possible for all local areas, the sample would have to be very large indeed and would unquestionably be both unaffordable and beyond the capacity of any survey organisation. However, the design proposed would easily allow boosts to be conducted in specific local areas, chosen perhaps because they were considered to typify areas of a certain type. This could be achieved by identifying businesses in each area to be boosted on the basis of postcodes and applying higher sampling fractions to them. If required, such boosts could be applied to only businesses of certain types (eg small retail premises). The authors note that boost interviews could be included in any national dataset simply by applying appropriate weights (although it is arguable that there would be little point in doing this because their weights would be so small). The authors recommend that allowance be made for the inclusion of local boost samples as required.

---

## 5. Options for the new survey

A summary of the recommendations discussed in the previous section can be seen in Appendix I. Based on these recommendations, this section outlines suggestions for the future development and possible structure for a future business crime survey.

The authors recommend that before any new survey is implemented an empirically based feasibility study should be undertaken. Ideally, this should include the following components: checks on the proposed sample

frame to ensure that it contains sufficiently accurate information to allow the proposed sample stratification to take place; exploratory interviews with respondents in both individual premises and head offices in order to ascertain which types of cost information are typically held at each level of organisations; small-scale cognitive testing of both premises and head office questionnaires with a view to establishing whether candidate questions are comprehended as intended and whether they ask for information that is readily available to respondents; and a medium-scale dress rehearsal survey covering both premises and head offices designed to test the workability of the field procedures.

### Possible structure for new survey

Final decisions on the scale and design of the sample will depend on both analysis priorities and available budget. However, the above requirements would, the authors feel, be met adequately by **a core survey covering up to 8,000 premises**, with 2,000 interviews in each sector included (for example, retail, manufacturing, services, and transport and distribution). This design would deliver confidence intervals of around  $\pm 3.5$  per cent around a 50 per cent estimate<sup>23</sup> for each sector and would be large enough to allow for a boost of 'night-time economy' premises. The authors recommend that the inclusion of a **supplementary sample of 500 head offices of multi-premises organisations** should be considered as an option. If local area boosts are deemed desirable, they could be readily attached to the above core design.

In order to meet the requirements for trend data, the survey would need to be repeated at regular intervals. Bearing in mind current pressures on public expenditure, the authors recommend that the **core survey should be repeated biennially** rather than annually. This would be sufficient to detect trends after the survey has been implemented a few times.

<sup>23</sup> Assuming a design effect of 2.5.

## Appendix A: Details of previous surveys reviewed

### A.1 National (UK) Surveys

#### 1994 Commercial Victimisation Survey

##### Overview

This survey was funded by the Home Office and conducted by the British Market Research Bureau (BMRB).<sup>24</sup> As well as being a stand alone survey, it also included an international component which provided data from England and Wales for inclusion in the International Crimes against Businesses Survey (ICBS). The survey covered crime against retail and manufacturing premises only.

The survey was carried out by telephone. It primarily focused upon collecting data on the extent and costs of victimisation, although it also collected data on what security measures were in place, sources of crime prevention information and contact with the police.

##### Survey population

The survey covered the population of retail and manufacturing premises (establishments). Sector eligibility was defined in terms of membership of the following 1980 SIC codes:

|                         |                           |
|-------------------------|---------------------------|
| Retailing premises:     | SIC (1980) codes 641- 656 |
| Manufacturing premises: | SIC (1980) codes 41- 49   |

The survey did *not* cover manufacture of metal goods, mineral products, chemicals, engineering, vehicle industries, or the construction industry.

##### Sample frame

The sample was drawn from the British Telecom Business Database.

##### Sample/Survey design

An initial sample of 9,000 premises was drawn; this was disproportionately stratified by two employee size band strata (one to ten and 11+) within each of two industrial sectors (retail and manufacturing). An equal number of premises were sampled within each of these four strata (meaning that a different sampling fraction was applied within each of the four strata).

<sup>24</sup> This is documented in Mirrlees Black, C. and Ross, A. (1995) *Crime against retail and manufacturing premises: findings from the 1994 Commercial Victimisation Survey*, Home Office Research Study 146, London: Home Office.



The initial sample was screened by telephone with a view to obtaining manager names and contact details; 6,602 members of the initial sample were contacted and contact details were obtained from 5,000. The contacts thus obtained were sent an advance letter and a preliminary data sheet outlining the information required for the main interview.

Main interviews were then conducted by telephone, evenly distributed between the four strata described above. The technical report suggests that stratum numbers were controlled by setting quotas, but is unclear as to how this was done in practice and how this might have affected sample coverage.

### Response rates

A 67 per cent overall response rate is reported, but this is misleading for two reasons. First, and most importantly, no account is taken of screening stage non-response. Of the initial sample of 9,000 addresses, only 4,999 were issued for main fieldwork. Although the report states that 6,602 premises were contacted and that 5,000 were successfully screened, it does not give any indication of either how many of the initial sample were issued for screening, nor of how many of those issued were estimated to be survey-eligible. The screen response rate could, in principle, be as low as 56 per cent (if all 9,000 initially sampled premises were both eligible and issued for screening) or higher than 76 per cent (if only the 6,602 contacted premises were issued and some turned out not to be eligible). Whatever the actual screening stage response rate was, it should have been, but was not, taken into account in the reported response rates.

Second, because it is unclear how main interview stage quotas were applied, it is not possible to ascertain either how many premises contacts were attempted for main stage fieldwork, or how many of these might have been eligible for the survey. Without this information it is not possible to calculate a main stage response rate.

In the light of these considerations, it is clear that, if response rate is to be regarded as an estimate of population coverage,<sup>25</sup> the reported figures are too high. It is likely that the true overall response rate is no greater than 50 per cent, and possibly considerably lower.

<sup>25</sup> See for example: Peter Lynn, Roeland Beerten, Johanna Laiho and Jean Martin (2001). *Recommended Standard Final Outcome Categories and Standard Definitions of Response Rate for Social Surveys*. ISER Working Paper.

### Questionnaire coverage

The survey covered the extent of victimisation of retailers and manufacturers, the costs of crime to retailers and manufacturers (it does not include indirect losses), the security measures in place, sources of crime prevention information and contact with the police.

## Crimes against retail and manufacturing premises 2002

### Overview

This survey was funded by the Home Office and conducted by IFF Research Ltd.<sup>26</sup> It was explicitly intended as a follow up to the 1994 Commercial Victimisation Survey, and again the survey covered crime against retail and manufacturing premises only. However, a number of modifications were made to the 1994 survey and this affected the strict comparability of the two surveys in some areas.

Two quantitative data collection exercises were undertaken:

- a telephone survey of business premises;
- a postal survey of manufacturers' head offices.

In addition, qualitative follow-up interviews with 40 telephone survey respondents were conducted.

### Premises Survey population

The telephone survey covered the population of retail and manufacturing premises (establishments) with up to 250 employees. Sector eligibility was defined in terms of membership of the following 1992 Standard Industrial Classification (SIC) codes:

|                         |  |
|-------------------------|--|
| Retailing premises:     | SIC (1992) codes 50.1-50.3, 52 (excl. 52.71-52.74) |
| Manufacturing premises: | SIC (1992) codes 15-22, 25 and 36                  |

These sectors overlapped with those used in the 1994 survey largely but not completely. Like the 1994 survey, the 2002 survey excluded a number of types of manufacturing premises, such as those concerned with minerals, chemicals and metal goods.

### Premises Survey sample frame

The sample was drawn from Yell (which was formerly the British Telecom Business Database).

<sup>26</sup> Documented in Shury, J., Speed, M., Vivian, D., Kuechel, A. and Nicholas, S. (2005) *Crime against retail and manufacturing premises: findings from the 2002 Commercial Victimisation Survey*. Home Office Online Report 37/05.

**Premises Survey sample/survey design**

An initial sample of 39,000 premises was drawn (21,000 in manufacturing and 18,000 in retail). These premises were divided into 11 sub-sectors each of which was further divided into three further strata based upon (i) number of employees, (ii) for premises with one to ten employees, and (iii) whether or not in the ten per cent most deprived wards. A disproportionately stratified sample was drawn using these 33 strata.

The initial sample was screened by telephone with a view to obtaining details of the manager responsible for security issues. The report states that 14,200 establishments were screened and that 11,752 were found to be eligible and willing to provide contact details. These were sent an experience of crime data sheet, and of these a further 1,092 were deemed ineligible. Of the remaining 10,660, main interviews were conducted with 6,516.

**Premises Survey response rates**

A 61 per cent overall response rate is reported but, as with the 1994 survey, this is misleading because no account was taken of screening stage non-response. Assuming that only 14,200 premises were issued for screening (and this is not completely clear in the report), then it would appear that the screen response rate on a base of eligible establishments was 90 per cent. Taking account of both screening and main stage non-response, the overall response rate would appear to be 55 per cent. However, the authors are not altogether confident of this figure because there is some lack of clarity in the presentation of response figures.

**Premises Survey questionnaire coverage**

This covered the level and type of victimisation experienced. It also looked at the costs of crime and at the wider effects, for example the time taken to deal with incidents and the impact on staff. The authors discuss the content of the questionnaire more fully below.

**Head Office Survey population**

The survey population comprised head offices of manufacturing companies. It is unclear as to how multi-national companies with head offices abroad were dealt with.

**Head Office Survey sample frame**

The Dun and Bradstreet listing of the data population within the manufacturing sector was used as the sample frame.

**Head Office Survey sample/survey design**

This is not clearly documented in the technical report. However, it is reported that 1,500 manufacturing companies were selected and issued for fieldwork in two batches.

**Head Office Survey response rates**

One hundred and eighty-one completed questionnaires were obtained from the 1,500 companies mailed, representing a 12 per cent response rate. With a response rate this low, survey estimates will be very vulnerable to substantial levels of non-response bias.

**Head Office Survey questionnaire coverage**

This covered the level and type of victimisation experienced. It also looked at the costs of crime and the time taken to deal with incidents.

**British Chambers of Commerce surveys**

The British Chambers of Commerce has conducted three surveys of business crime, one in 2001, one in 2004 and one in 2008.<sup>27</sup>

The surveys did not use scientific sampling methods. In each, accredited Chambers were asked to participate. Those Chambers that agreed to take part were asked to distribute self-completion questionnaires to all their members or to 'representative samples' of them. Response rate figures were not reported, but, in line with the authors' general experience of web/postal surveys amongst samples of businesses, they would expect these to have been low.

|               | 2001   | 2004  | 2008   |
|---------------|--|---|--|
| Undertaken by | In-house   | Research Design Ltd                         | Research Design Ltd  |
| Sample frame  | Membership lists of 34 Chambers of Commerce (out of 70 approached) | Membership lists of 46 Chambers of Commerce | Membership lists of 54 Chambers of Commerce (out of 70 approached) |
| Sample        | 2,914 postal questionnaires received                               | 2,788 by postal or web-based questionnaire  | 3,916 by web-based questionnaire                                   |
| Response rate | Unknown  | Unknown                                     | Unknown  |

<sup>27</sup> BCC (2001) *The British Chambers of Commerce Business Crime Survey*; BCC (2004) *Setting Business Free from Crime*; and BCC (2008) *The Invisible Crime*.

### Questionnaire coverage

The questionnaires covered the extent and type of crime committed against businesses, including computer-related crimes and the steps taken to prevent them. The cost of crime and its impact were measured along with the extent to which crime against business is a problem in the local area. Awareness of community safety and crime reduction partnerships, and useful sources/effectiveness of crime reduction techniques were also gauged. Finally, opinion with regard to whether business crime should be a Key Performance Indicator for the police was measured.

## Crime against business in Scotland

### Overview

This survey set out to collect data on the nature, extent and costs of crime as it affects businesses in five sectors in Scotland. It was funded by the Scottish Government (previously the Scottish Executive) and conducted by System Three Social Research.<sup>28</sup>

Two surveys were conducted:

- a telephone survey of around 2,500 business premises designed to obtain information on prevalence/incidence of crime and crime prevention measures used; and
- a postal survey of head offices primarily aimed at obtaining information on costs of crime.

### Premises Survey population

This survey covered business premises located in Scotland in eligible sectors with three or more staff. Eligible sectors were as follows:

|                                  |  |
|----------------------------------|--|
| Manufacturing                    | SIC codes 15, 17-26, 36, 27-35   |
| Construction                     | SIC code 45  |
| Wholesale/Retail                 | SIC codes 50, 51, 52   |
| Hotels/Restaurants               | SIC codes 5530, 5551-5552, 5540, 5511-5523                                       |
| Transport and telecommunications | SIC codes 6024, 6311—6321, 6010-6023, 6110-6220, 6322-6323, 6411-6420, 6330-6340 |

### Premises Survey sample frame

The sample was drawn from Dun and Bradstreet's business database.

### Premises Survey sample/survey design

The intention was to obtain 500 interviews in each of the five sectors. An initial sample of unspecified size was sampled at random from the sample frame and issued for initial telephone screening during which interviewers checked that the business continued to operate at the sampled premises and obtained the name of the owner/manager.

Those found to be in business, for which contact details were obtained, were sent an experience of crime datasheet covering principal data items required in the interview. Interview attempts were then made with the identified owners/managers.

The above procedure was repeated until 500 interviews were obtained in each sector.

### Premises Survey response rates

The authors report a 64 per cent response rate, but, for reasons already discussed for the two Home Office surveys, this is an overestimate, in particular because it takes no account of screening non-response. Furthermore, details about the number of survey eligible cases that were issued for fieldwork cannot be extracted from the published response tables, and it is, therefore, not possible to calculate a response rate figure which can be regarded as an estimate of how much of the eligible population was covered by the responding sample.

### Premises questionnaire coverage

This covered business characteristics, their experiences of crime and their investment in crime prevention.<sup>29</sup>

### Head Office Survey population

The survey population comprised the 'largest businesses' in Dun and Bradstreet's business database with head offices in the UK. This approach was taken because many businesses with head offices outside Scotland have premises in Scotland.

### Head Office Survey sample frame

The sample was drawn from Dun and Bradstreet's business database.

<sup>28</sup> Documented in John Burrows, Simon Anderson, Joshua Bamfield, Matt Hopkins, and David Ingram (2001) *Crime against business in Scotland*. Scottish Executive Central Research Unit.

<sup>29</sup> Unfortunately the Scottish Government (previously the Scottish Executive) was unable to supply the authors with copies of the questionnaires and they were, therefore, unable to look at questionnaire coverage in any detail.

### Head Office Survey sample/survey design

This is not documented in detail, but from the report one can ascertain:

- two hundred and fifty businesses with head offices in Scotland and 650 with head offices elsewhere in the UK were sampled;
- that head offices were distributed across sectors roughly in line with sector Gross Domestic Product (GDP) (at factor cost), but that numbers were boosted in the two smallest sectors: hotels/restaurants and transport/communications.

### Head Office Survey response rates

Responses were obtained from 148 businesses representing a response rate of 18 per cent after removing businesses which were inactive in Scotland. With a response rate this low, it is clear that survey estimates will be very vulnerable to non-response bias.

### Head Office questionnaire coverage

This collected information on costs businesses incurred from crime in Scotland from victimisation and investment in prevention.<sup>30</sup>

## Federation of Small Businesses (FSB) Survey

### Overview

The survey<sup>31</sup> was produced for the Federation of Small Businesses by the Welsh Enterprise Institute (part of the Business School at the University of Glamorgan). The survey is carried out every two years.

This survey looks at: the extent to which businesses had been the victims of crime; the types of crime experienced; the types of business most affected; and the impact of crime on the small-business sector. It also sought to compare the levels of crime affecting urban and rural businesses.

Data were collected via a postal survey. However, businesses had the option of filling in the questionnaire electronically, on the FSB website.

### Survey population and sample frame

The survey covered members of the Federation of Small Businesses in England, Northern Ireland, Scotland and Wales.

### Sample/Survey design

The survey was publicised via the FSB website and by emailing the FSB membership. Printed copies were posted and were also available electronically on the FSB website. A total of 8,742 questionnaires were completed in the 2008 survey.

### Response rates

The sampling method used did not permit the calculation of response rates.

### Questionnaire coverage

The questionnaire covered the extent of crime and the type of crime. It also gathered data on the costs and the impact of crime on businesses as well as how effective crime reduction methods were.

## Retail Crime Surveys

### Overview

The British Retail Consortium (BRC) survey<sup>32</sup> is an annual retail crime survey conducted by the BRC to understand the nature, cost and extent of crime in the retail industry and its effects.

### Survey population

The survey aims to cover all sectors of the retail industry.

### Sample frame and sample/survey design

The survey is disseminated to BRC members. This includes trade associations and retailers. In the most recent survey (2007/08), data were drawn from over 12,500 retail outlets in the UK. The majority of businesses in the sample were large enterprises employing over 250 employees, with some medium sized (between 50 and 250) and small businesses (fewer than 50). The survey was conducted through a web link and a hard copy option was available (for smaller businesses without internet access).

### Response rate

The total sample size was not described therefore the response rate is unknown.

### Questionnaire coverage

The questionnaire covers the nature, cost and extent of crime in the retail industry, and its effects. Specific topics covered include customer and employee theft, violence against staff, robberies and e-commerce crime.

30 See, for example, Jon Hales and William O'Connor (2008) *Methodological Review of Research with Large Businesses Paper 3: Data Collection*. National Centre for Social Research.

31 Most recently documented in the report: *Putting the economy back on track: Crimes against Business*, Federation of Small Businesses 2008.

32 The most recent survey is documented in *Retail Crime Survey 2007-2008*, British Retail Consortium, 2008.

## A.2 National surveys from outside the UK

### **National Retail Security Survey (America – University of Florida)**

#### Overview

The purpose of this survey was to provide loss prevention executives with current market-specific information to assist in efforts to limit shrinkage and losses. It is an annual postal survey which covers the whole retail industry.<sup>33</sup>

#### Survey population

The survey covered the population of retailers in 20 different retail markets but excluded restaurants, bars, motor vehicle dealers, service stations, direct catalogue sale outlets, and internet 'e-tailers'.

#### Sample frame

The sample was drawn from their existing mailing list of retailers.

#### Sample/Survey design

No further details were included in the report as to how the sample was selected from the list of retailers. The survey was conducted by mail. The number of questionnaires sent out is not described, nor is the precise method for data collection; however, anonymous responses were received from a total of 120 retail companies.

#### Response rate

The response rate is unknown as the total sample size is not described in the survey report. However, it was noted that the response rate was lower than usual in 2001 – and it was suggested that this was related to economic recession and hardship. It is noted that returned questionnaires indicated that an unprecedented number of retail establishments filed for bankruptcy or went out of business.

#### Questionnaire coverage

The questionnaire appears to focus on levels of losses rather than actual numbers of incidents. The questionnaire measures the total amount of loss suffered by the company due to employee theft, shoplifting, administrative and paperwork error, vendor fraud, and check/cash/credit card losses. It also measures the perceived sources of inventory shrinkage estimated by retailers and the percentage of loss for which each source is attributable. It also gathered details on their budget for loss prevention, the number of loss prevention employees, and strategies in place for preventing loss.

<sup>33</sup> This is documented in Hollinger, C. and Davis, H. (2002) 2001 *National Retail Security Survey: Final Report*, University of Florida.

### **The Global Retail Theft Barometer 2007**

#### Overview

This survey was conducted by the Centre for Retail Research (Nottingham) and was funded by an independent grant from Checkpoint Systems, Inc. This was the first global study of shrinkage.<sup>34</sup> It was a comparative study of retail crime in 32 different countries worldwide, covering Europe, North America, Australia and Asia.

This used a postal questionnaire (also available on-line) made available in a number of different languages.

#### Survey population

The survey covered the population of 'major retailers' (of all kinds) in the countries surveyed.

#### Sample frame

The sample was drawn from a combination of commercial lists and the Centre's own list of retailers. No further information was provided as to how these lists were originally compiled or the extent of their coverage.

#### Sample/Survey design

A sample of 3,600 major retailers was selected to receive a questionnaire. It is unclear how this sample was selected from their lists. However, the number of questionnaires sent out to retailers in each country was proportional to the size of the retail industry in that country. Between 25 and 45 questionnaires were sent to smaller countries in an effort to gain replies from a sufficient representative sample of the sector as a whole in each country.

The questionnaire was made available in French, English, German, Italian, Japanese and Spanish. It was also available to be completed on-line.

#### Response rate

A total of 820 completed questionnaires were received. Of these, 228 were from North America, 489 were from Europe and 103 were from Asia-Pacific. The overall response rate was 22 per cent. This is low, and results are therefore likely to be susceptible to non-response bias.

#### Questionnaire coverage

The questionnaire was designed to capture the extent of crime related losses due to shrinkage suffered by retailers. It did not record the number of incidents of crime, but rather the monetary value of the losses due to shrinkage caused by customer thieves, employees, supplier-vendors

<sup>34</sup> *The Global Retail Theft Barometer (2007)* Centre for Retail Research, Nottingham.

and internal error. Information was also gathered about the security policies adopted by companies and the amount spent on loss prevention and security.

### **Reporting of Crime against Small Retail Businesses (Australia)**

#### **Overview**

With the help of the Council of Small Business Organisations of Australia a survey was carried out in 1999 to assess the extent of crime committed against small retailers.<sup>35</sup>

This was a postal survey covering victimisation and the costs of crime to small businesses.

#### **Survey population**

The survey covered six retail sectors: cafes/restaurants/takeaways; general stores/milk bars; liquor outlets; service stations; news agencies; and pharmacies.

#### **Sample frame**

The source from which the sample was drawn is not described.

#### **Sample/Survey design**

A postal questionnaire was sent at the end of 1999 to 28,000 randomly selected small businesses. The six sectors chosen were generally thought to have higher crime risks. It followed the Australian Bureau of Statistics' (ABS) definition of small business (ABS 1999, *Small Business in Australia 1999*, cat no 1321) of employing less than 20 staff. A total of 3,834 responses were received from small retail businesses.

#### **Response rate**

The response rate for the survey was 16 per cent. This is very low and is likely to lessen the confidence with which findings can be generalised.

#### **Questionnaire coverage**

The questionnaire covered victimisation for the financial year 1998/99; however, it was designed with a view to determining the association between crimes and reporting to the police and understanding the reasons for reporting or not reporting the incidents, rather than to establish any trends and patterns in victimisation. The costs of the incidents to businesses were not measured.

<sup>35</sup> Reported in Taylor, N. (2002) *Reporting of Crime against Small Retail Businesses*, Trend and Issues in Crime and Criminal Justice No 242, Australian Institute of Criminology, Canberra.

### **Efficient Consumer Response (ECR) European Shrinkage Survey**

#### **Overview**

The purpose of the survey was to gain an understanding of the extent and nature of the shrinkage problem and the methods currently used for its control.<sup>36</sup> A previous survey took place in 2000<sup>37</sup> which provided a benchmark against which organisations could compare their performance on loss of stock. It also helped to guide the subsequent work of the ECR Europe Shrinkage Group.

The survey conducted in 2004 was needed to update the benchmark for performance and to allow for the growth of the European Union. It therefore covered 26 countries (five more than the original survey carried out in 2000) and included more details on the nature and extent of stock loss in the retail supply chain.

A definition of shrinkage was developed in order to enable like-for-like comparison across the different countries.

A postal questionnaire was used and, where possible, this was also made available on-line.

#### **Survey population**

The survey population was made up of two distinct populations.

The first population was European retailers "that had the largest share of the market within their own country, with the aim being to maximise the representation of the entire market within the survey".

The second population was of large manufacturers operating in Europe which supply the retailers.

#### **Sample frame and sample/survey design**

Information from M+M Planet Retail, a provider of global retailing information, was used to identify the sample. They provided details on market share within countries in Europe, and used this to target companies with a large market share in Europe. On average, for those countries selected to be included in the analysis, the market share of the respondents varied between ten and forty per cent.

<sup>36</sup> The findings are documented in Beck, A. (2004) *Shrinkage in Europe 2004: A Survey of Stock Loss in the Fast Moving Consumer Goods Sector*, A ECR Europe White Paper, Brussels: ECR Europe.

<sup>37</sup> Beck A. and Bilby, C. (2001) *Shrinkage in Europe: A Survey of Stock Loss in the Fast Moving Consumer Goods Sector*, ECR Europe.

A total of 239 questionnaires were sent out to companies in 25 countries. The questionnaire was translated into seven languages (Czech, French, German, Italian, Polish, Portuguese and Spanish).

Follow-up letters and emails were sent to companies that failed to respond. Also, electronic versions of the questionnaire were made available to be completed, where possible.

#### Response rate

*Retailers:* In total, 31 responses were received from retailers and this covered a total of 18 countries. This is a 13 per cent response rate. The rate varied between countries; the response rate from Germany was too low to be included and there was a poor response rate from some Eastern European countries.

*Manufacturers:* 38 questionnaires were sent out to the largest manufacturing companies operating in Europe. The response rate was very poor and as a result the data were not included in the report. However, some data on the cost of shrinkage to the sector were included as collected from a subsample of eight manufacturing companies.

#### Questionnaire coverage

Rather than count incidents of victimisation, the questionnaires covered the nature and extent of stock loss in the retail supply chain within the company, the recording of shrinkage, what responses were made to the problem, and how companies work with others. Two questionnaires were developed for the retail sample, one collecting information about stock loss in the entire organisation and one focusing specifically upon stock loss in the distribution chain. A single questionnaire was developed for the manufacturing sample.

### A.3 'Model' for International Surveys

In November 1992, a meeting of the United Nations Inter-regional Crime Research Institute in Rome agreed that a group of delegates should design an internationally comparable survey to investigate business crime. That group identified key methodological criteria to be adopted by varying countries.

This approach was subsequently adopted in a number of surveys across a number of countries. The authors will focus on some of the first surveys to adopt the design, notably:

- the International Crime Business Survey;
- the Australian Business Crime Survey.

It should be noted that the UK Survey on Commercial Victimization also included an international component which provided data from England and Wales for inclusion in the International Crimes against Businesses Survey. However, the details of the UK surveys are dealt with in section A.1 'National (UK) Surveys'.

#### International Crime Business Survey

##### Overview

The first International Commercial Crime Survey (ICCS) was carried out in 1994. This focused on the experiences and opinions in relation to commercial crime. The questionnaire was revised and renamed in a second survey in 2000 known as the International Crime Business Survey (ICBS) to allow a greater focus on corruption, fraud and extortion.<sup>38</sup> In the main the authors have focused on the second of these in their discussion.

ICBS was conducted in nine Central-Eastern European capital cities in 2000. The survey was carried out face to face in six countries by Computer Assisted Telephone Interviewing (CATI) in two countries and by a manual telephone survey in one country.

The questionnaire was translated into the languages of all participating countries. Funding was provided by the Ministry of Justice and Foreign Affairs of the Netherlands and the Ministry of Justice of Hungary.

##### Survey population

The survey covered predominantly small retail businesses. The sectors included were described as, services, manufacturing, retail/non-food, wholesaling/distribution and retail/food.

It should be noted that the population of the survey was limited to the capital city of each country mainly for cost reasons. Therefore the findings cannot be regarded as representative of the entire country.

##### Sample frame and sample/survey design

The table below\* illustrates how the sample was drawn for each of the nine countries surveyed.

---

<sup>38</sup> The full report detailing the method and findings is documented in Anna Frate (2004) 'The International Crime Business Survey (2000): Findings from nine Central-Eastern Cities', *European Journal on Criminal Policy and Research*, Volume 10, 2-3, pp137-161.

| City      | Country   | Sample size | Sampling  |
|-----------|-----------|-------------|---|
| Tirana    | Albania   | 493         | List of business owners and businesses  |
| Minsk     | Belarus   | 316         | Random sampling out of the Directory of partner enterprises founded by members of the Minsk – capital union of entrepreneurs and employers and the directory Business Belarus |
| Sofia     | Bulgaria  | 532         | Sample based on the database of the National Statistical Institute  |
| Zagreb    | Croatia   | 457         | List of companies in the city of Zagreb   |
| Budapest  | Hungary   | 517         | Sampling based on the database of the National Statistical Institute (KSH)  |
| Vilnius   | Lithuania | 525         | Random route method   |
| Bucharest | Romania   | 480         | Randomly selected from three business databases   |
| Moscow    | Russia    | 500         | Random sample of Moscow companies phones out of WA-2 database (about 10,000 companies in Moscow)  |
| Kiev      | Ukraine   | 502         | Sample from the latest (1998) State Statistics Committee data   |

\* Table taken from p 140 - Anna Frate (2004) 'The International Crime Business Survey (2000): Findings from nine Central-Eastern Cities', *European Journal on Criminal Policy and Research*, Volume 10, 2-3

A sample of 4,322 was drawn, and this was broken down by country as displayed in the table above. The survey was carried out by a major international survey company, Gallup. In six countries a face-to-face survey was conducted; in two countries CATI was used and in one country the surveys took place using a manual telephone.

#### Response rate

The average response rate reported across the nine countries was 65 per cent. This ranged from as low as 30 per cent in Moscow to as high as 99 per cent in Tirana.

#### Questionnaire coverage

The focus of the questionnaire was on victimisation including prevalence and descriptions of the incidents. Costs to the business were not determined. Other areas covered were levels of reporting to the police and the relationship with the police.

### Crimes against Businesses in Australia

#### Overview

The international method for business crime surveys was also adopted in the Australian Crime against Businesses Survey conducted by the Roy Morgan Research Company during August 1993.<sup>39</sup> It was considered useful to conduct a survey to gather a level of detail that would inform crime

prevention policy development, as police and industry data were not sufficient to guide such policy.

#### Survey population

The survey covered the population of retailers including food retail, non-food retail, manufacturing, primary industry and tourism/recreation.

#### Sample frame

The source from which the sample was drawn is not described.

#### Sample/Survey design

The five industrial sectors included were subdivided into three size categories and related to national figures to ensure that there was a representative quota of businesses in each category. A total of 966 business premises completed the survey. The sampling method used and the mode of data collection were not described in the report.

#### Response rate

The total sample size is not described in the report, therefore the response rate is unknown. This may be because a quota sample was used, although the report did not clarify whether or not this was the case.

#### Questionnaire coverage

The questionnaire covered the level, frequency and type of crime committed against businesses, as well as the costs to business (including shrinkage and indirect losses due to crime). Perceptions of levels of crime in the neighbourhood were gathered and the specific crimes considered were burglaries, vandalism, vehicle crime, thefts, frauds, robberies, assaults/threats/intimidation and corrupt

39 The findings are documented in Walker, J. (1995) *Crimes against Businesses in Australia*, Trends and Issues in Crime and Criminal Justice No 45, Australian Institute of Criminology, Canberra. However the full report, likely to contain more technical details about the methodology used, was not available electronically and, therefore, it was not possible to obtain a copy within the timescales for this project – Walker, J. (1994) *The First Australian National Survey of Crimes Against Businesses*, Australian Institute of Criminology, Canberra.



practices. Information on crime prevention measures and opinion of police activities tackling business crime were also gathered.

## A.4 Local Surveys (UK and abroad)

### **The Small Business and Crime Initiative Survey**

#### Overview

The Small Business and Crime Initiative (SBCI) was a three-year demonstration project funded by the NatWest Charitable Trust. The purpose was to accumulate research evidence that small businesses are chronic victims of crime.

A survey was carried out by the SBCI to estimate and address significant crimes against small businesses.<sup>40</sup>

#### Survey population

The survey covered small businesses from all sectors in two target areas selected within Leicester.

#### Sample frame

The SBCI created a list of all businesses in the two target areas by walking through all the streets and noting the addresses of businesses. At the same time, they collected information on observable features of the business such as ease of escape and whether neighbouring premises were occupied.

#### Sample/Survey design

One thousand, three hundred and eighty-one businesses were identified: 680 in Belgrave and 701 in the West End. Face-to-face interviews were attempted with all of these.

#### Response rate

In total, 894 interviews were completed representing a 65 per cent response rate across the two areas.

#### Questionnaire coverage

The questionnaire looked at the rate of victimisation of crime against businesses, the cost to small businesses, and any preventive measures in place.

### **Crime and Small Businesses in the Midwest Survey 1996**

#### Overview

This survey<sup>41</sup> was undertaken to further knowledge of the extent and nature of crime committed within and against small businesses, employees and customers.

#### Survey population

The population of the survey was small businesses in six areas – Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin. The purpose was to select a sample representative of small businesses in the Midwest, rather than representative of each type of business.

#### Sample frame

A dataset containing details of 1,125,000 businesses was purchased from Dun and Bradstreet Information Services from which to draw the sample.

#### Sample/Survey design

From the business dataset, a random sample of small businesses was drawn, stratified by type of business (i.e. manufacturing, retail, wholesale trade, and service) and location.

An initial contact letter was sent to 1,000 randomly selected businesses explaining the purpose of the study. Of the 1,000 letters sent, seven per cent (n=72) were returned due to an invalid address. The full survey was administered using Computer Assisted Telephone Interviewing.

#### Response rate

In total, 720 businesses were contacted. Of these, 14 per cent (n=100) told the interviewer to call back and 31 per cent (n=220) refused to participate. Of the businesses contacted, the response rate was 56 per cent (n=400) (although of the initial sample of 1,000, this represents a 40 per cent response rate).

#### Questionnaire coverage

The National Crime Victimization Survey (NCVS) and CVS were used as guides for the survey instruments. Respondents were asked incident screening questions and if they answered 'yes' an incident report for each incident was completed in order to collect specific offence data. The survey asked for information about crimes occurring between April 1995 and April 2006.

The questionnaire covered a number of topics, including burglary, employee robbery, employee assault, employee theft, motor vehicle theft or break-in, vandalism, and

---

40 Documented in Tilley, N. and Hopkins, M. (1998) *Business as Usual: An Evaluation of the Small Business and Crime Initiative*, Police Research Series Paper 95, London: Home Office.

41 Documented in Fisher, B. and Looye, J.W. (2000) 'Crime and Small Businesses in the Midwest: An examination of overlooked issues in the United States', *Security Journal*, Volume 13, Number 1, pp45-72.

employee rape. No direct measure was made of the costs of the crimes beyond identifying which types of financial losses were most common. Information was gathered on the crime prevention and security measures in place, and the effects of crime on the business.

### **Crime and the Business Community – Cornwall Survey 2001**

#### Overview

A postal survey of crime of businesses in Cornwall<sup>42</sup> was conducted in 2001 as part of the process for producing the 2001 crime audits for the county of Cornwall. It was considered useful because the police-recorded statistics did not distinguish between crimes against private individuals and those against households and businesses. Furthermore, it was of interest to determine the extent of business crime in an area distinctive because it is rural, low income and dependent on tourism.

#### Survey population

The population of the survey was small businesses from each of the six CDRPs in Cornwall.

#### Sample frame

The sample was drawn from the county council's database of small businesses.

#### Sample/Survey design

A total of 1,500 businesses were selected to receive the survey. This sample was disproportionately stratified by CDRPs: in each CDRP, 250 businesses were sent a questionnaire.

#### Response rate

In total, 621 completed questionnaires were received. This represents a response rate of 41 per cent (which, as the authors note, is a good rate for a postal survey that involved no reminder letter).

#### Questionnaire coverage

The questionnaire related to experiences of crime over the previous 13 months. (The report notes that this reference period was used because the questionnaires were distributed by the county council a month behind schedule) The questionnaire gathered information on the nature and extent of victimisation. No attempt was made to calculate the cost of crime to the business.

## **Appendix B: Organisations contributing to stakeholder consultations**

### **1. Organisations consulted during senior stakeholder interviews**

John Lewis Partnership  
Local Government Association  
Association of Convenience Stores  
The Federation Against Copyright Theft  
British Retail Consortium  
Co-operative Group Ltd.  
Federation of Small Businesses  
British Chambers of Commerce  
Union of Shop, Distributive and Allied Workers

### **2. Internal Home Office consultation:**

Crime Surveys Programme  
Crime Strategy Unit

### **3. Home Office and external stakeholder workshop**

| Home Office:                              | External Stakeholders:                         |
|---|--|
| Crime Surveys Programme                   | Dept. for Business, Information and Skills     |
| Crime Strategy Unit                       | Union of Shop, Distributive and Allied Workers |
| Home Office Scientific Development Branch | The Co-operative Group                         |
| Organised and Financial Crime Unit        | Association of Convenience Stores              |
| Local Delivery Directorate                | British Chambers of Commerce                   |
| Violent Crime Unit                        |  |
| Central Performance Analysis Programme    |  |

<sup>42</sup> Documented in Mawby, R. (2003) 'Crime and the Business Community: Experiences of Businesses in Cornwall, England. *Security Journal*, Volume 16, Number 4, pp45-61.

## Appendix C: Inclusion of head offices

### Arguments in favour of inclusion of head offices

1. The cost of crime is relevant at both levels; inclusion will paint a fuller picture (i.e. head offices may also experience crime).
2. Head offices will hold relatively robust information on costs, which will not always be available at premises level.
3. Head offices will be the best source of data on fraud (this is not likely to be held at premises level), e-crime and 'shrinkage' (though concerns were raised that shrinkage estimates would skew the data as much shrinkage can be attributed to poor recording or administrative error).

### Arguments against inclusion of head offices

4. Head offices may not have readily available information on costs of crime at the individual premises level; national cost data, however, should be readily available.
5. Premises will not report all crime to the head office (e.g. incidents not affecting stock levels).
6. Head offices will not always release cost of crime information, particularly for crimes committed in head offices because of reputational risk.
7. There would be a risk of double-counting if, for example, a branch of Tesco gave information on crime levels and Tesco head office did the same.<sup>43</sup>
8. Head offices may record relevant data on a number of different data systems, and it may therefore not always be practical for these data to be pulled together for a survey.

Overall, head office inclusion was felt to be warranted, although it was accepted that it might not be appropriate to include them as part of a main survey.

<sup>43</sup> In practice, appropriate attention to data collection and data processing procedures would prevent this from happening.

## Appendix D: Topics for inclusion

| Broad crime type      | Detailed crimes  |
|-----------------------|--|
| PROPERTY CRIMES       | Commercial robbery   |
|                       | Fraud and forgery  |
|                       | Shop theft   |
|                       | Theft by employees   |
|                       | Theft of and from vehicles   |
|                       | Theft of plant   |
|                       | Making off without payment (for example from petrol forecourts)  |
| VIOLENT CRIMES        | Assault  |
|                       | Harassment   |
|                       | Robbery  |
|                       | Violence against shop workers  |
| ANTI-SOCIAL BEHAVIOUR | Criminal or nuisance behaviour causing harassment, alarm or distress to staff or customers, including: |
|                       | verbal abuse;  |
|                       | low-level harassment and intimidation, including racial intimidation;                                  |
|                       | graffiti and vandalism   |
|                       |  |

## Appendix E: Additional content requirements

In addition to the core questionnaire content outlined in the body of the report, stakeholders suggested that the survey might also collect information on the topics listed below.

- Fear of crime measures (as measured by the British Crime Survey).
- Crime between businesses.
- Political acts of sabotage (e.g. leaving razor blades in food).

- Details of who the perpetrators were.
- Security and prevention questions (e.g. on fitting of doors, locks, CCTV and other security items and associated costs).
- The police and CDRPs – for example, confidence in the police and engagement with other support agencies and partners.
- Awareness of help available from police, CDRPs, etc.
- Awareness of policy initiatives.
- Crime reporting.

---

## Appendix F: Main survey requirements

### Requirements relating to general design and survey sample

1. The surveys should allow trends in business crime to be measured; preferably, annual estimates should be obtained.
2. The survey should prioritise national estimates over regional ones.
3. The survey should include enterprises of all sizes (and therefore include large as well as small and medium ones).
4. The survey should cover a wide range of sectors of the economy rather than being focused upon a small number of relatively crime-prone sectors (e.g. retail).
5. In particular, it should enable good estimates to be obtained for retail, manufacturing, service, and transport and distribution sectors.
6. If possible the survey design should enable analysis at very local levels to be carried out.

### Requirements relating to type of data to be collected

7. The survey should be primarily focused on measuring the amount of crime and its costs rather than on perceptions of crime.
8. However, the survey should also include measures of response to crimes and of confidence in the police.
9. The surveys should aim to cover three general categories of crime/crime-like behaviour: (i) property crime; (ii) violent crime; and (iii) anti-social behaviour.
10. For some stakeholders, the ability to obtain separate estimates for very specific business types (for example, retail food, self-employed individuals, businesses making up the 'night-time economy') will be important.
11. The survey should be able to analyse results by new low-level 'place' type identifiers – for example, high streets, other parades of shops, industrial estates, rural locations, etc.

### Other requirements

12. Data should be released quickly after survey fieldwork in order to ensure that results are timely.
-

## Appendix G: SIC 2007

| Section | Description   |
|---------|---|
| A       | Agriculture, forestry and fishing   |
| B       | Mining and quarrying  |
| C       | Manufacturing   |
| D       | Electricity, gas, steam and air conditioning supply   |
| E       | Water supply, sewerage, waste management and remediation activities   |
| F       | Construction  |
| G       | Wholesale and retail trade; repair of motor vehicles and motorcycles  |
| I       | Accommodation and food service activities   |
| H       | Transportation and storage  |
| J       | Information and communication   |
| K       | Financial and insurance activities  |
| L       | Real estate activities  |
| M       | Professional, scientific and technical activities   |
| N       | Administrative and support service activities   |
| O       | Public administration and defence; compulsory social security   |
| P       | Education   |
| Q       | Human health and social work activities   |
| R       | Arts, entertainment and recreation  |
| S       | Other service activities  |
| T       | Activities of households as employers; undifferentiated goods and services-producing activities of households for own use |
| U       | Activities of extraterritorial organisations and bodies   |

## Appendix H: 2002 CVS questionnaire structure

| Section  | Content   |
|--|---|
| Background   | Business activities, when moved to premises, premises details, location of premises, crime problems in area and characteristics of local area   |
| Crime screener questions   | Whether been victim of each of 13 types of crime in past 12 months  |
| Detailed follow-up questions on:   |   |
| Burglary<br>Attempted burglary<br>Vandalism<br>Theft of vehicles<br>Theft from vehicles<br>Theft by customers<br>Theft by employees<br>Theft by outsiders<br>Theft by persons unknown<br>Fraud by employees<br>Fraud by outsiders<br>Robbery<br>Assaults and threats<br>Electronic crime<br>Bribery and extortion<br>Tobacco and alcohol smuggling<br>Being offered stolen goods | Largely standard set of questions covering, in the main: number of crimes of relevant type in past 12 months; most recent incident; further incident details; costs of incident; staff hours spent on it; police reporting; insurance claims made; civil action taken; other action taken;              |
| Insurance  | Extent of insurance; reasons for not being insured  |
| Crime prevention measures  | Protective measures to premises, burglar alarms, other security measures, use of security staff and entry control measures, criminal record checks, co-operative crime prevention measures, effectiveness of crime prevention measures, advice received on crime prevention, costs of security measures |
| Police and security in local area  | Contact with police, satisfaction with police, feelings of safety in local area   |
| Business details   | Type of company, vehicle ownership, opening hours   |

## Appendix I: Summary of recommendations for a new survey

It is clear from the stakeholder consultation that there is a demand for a new national survey of business crime. The authors recommend that, as a minimum, this should have the following characteristics:

- its core element should be a sample of premises – it may also include a supplementary sample of head offices;
- the premises sample should cover premises of all sizes;
- it should cover retail, manufacturing, service, and transport and distribution (excluding public transport) sectors;
- it should include sufficient businesses involved in the ‘night-time economy’ to permit separate estimates to be made;
- the Experian National Business Database should probably be used as the sample frame in the light of its good telephone coverage – however, the authors acknowledge that this decision may need to be revised in the light of other design decisions;
- it should collect data by means of the ‘standard’ CATI business survey field methodology;
- the interview should be limited in length to an average of about 25 minutes;
- the premises survey questionnaire should be largely based upon that used in the 2002 CVS, although it will need modifying in the light of changes in crime patterns, possible changes in sectorial coverage and changing policy requirements;
- the head office survey questionnaire should be focused upon costs of crime, although its exact content should only be determined after preliminary exploratory interviews have been conducted with head offices;
- it should cover large businesses as well as those with fewer than 250 employees;

- the sample should be disproportionately stratified by size and, possibly, by sector;
- the survey should be repeated regularly.

---

## Appendix J: Survey design questions considered in second workshop

1. In principle, would it be desirable to include head offices as well as premises?
2. Which Standard Industrial Classification should be included in the survey?
3. Do you want to include businesses of all sizes or apply large/small size cut-offs?
4. For which subgroups do you want separate estimates?
5. How accurate do you want subgroup estimates to be?
6. How large should the sample be?