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Business as Usual:

An Evaluation of the Small Business and Crime Initiative

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Policing and Reducing Crime Unit: Police Research Series

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Foreword

Crimes against businesses occur at a very high rate, cause significant losses and affect the quality of lives of those working in them. These problems can be particularly acute for small businesses, threatening their economic viability.

The Small Business and Crime Initiative (SBCI), described in this report, is the first major project to estimate and address significant crimes against all types of small business. The positive findings of the evaluation – with particularly marked falls in commercial burglary – demonstrate the potential of such initiatives to achieve substantial reductions in crime.

The research also develops our understanding of repeat victimisation. New evidence suggests that chronic repeat victimisation moves over time, with premises similar and close to current targets particularly vulnerable to future attacks. This has important implications for crime prevention practitioners who need to monitor these patterns and take early action.

S W BOYS SMITH
Director of Police Policy
Home Office
September 1998

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This evaluation has been conducted with the full co-operation of the team implementing the Small Business and Crime Initiative. Their hard efforts gave us something worth looking at. They were also very helpful to us, in keeping records assiduously, answering innumerable questions openly and honestly, and in providing welcome hospitality whenever we visited the project offices. We have also been happy to receive comments on working drafts.

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We are grateful for valuable comments on earlier drafts from Tony Holden, Paul Ekblom, Gloria Laycock, Ken Pease and Barry Webb.

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Executive summar y

The Small Business and Crime Initiative was a demonstration project aiming to reduce crime against small businesses in two areas in Leicester, with a combined population of about 1,400 businesses. It was funded by the NatWest Bank Charitable Trust, and received advice and support from the Head of the Police Research Group, from its planning stage through to the publication of evaluation findings. It was led by John Burrows of Morgan Harris Burrows (MHB), managed by Tony Holden of Crime Concern, and employed three staff through most of the implementation phase.

The initiative adopted a problem-solving approach. It began with a crime survey of all businesses identified in the area, which were willing to be interviewed. This confirmed previous research showing that businesses are at much higher risks of victimisation across a range of offence categories than are households. It also confirmed previous research on commercial crime (and other crime too) that victimisation tends to be very unevenly distributed – repeat victimisation is a very significant problem.

On the basis of the survey findings, it was decided to focus on those chronically victimised – suffering ten or more incidents in a year; on victims of commercial burglary; and on those experiencing frequent incidents of customer theft, abuse and fraud.

Measures were implemented in relation to each of these problems:

- all chronically victimised businesses, identified in the initial survey, were contacted and offered advice, and further referrals from the police were also dealt with;
- systems for rapid referral of burglary victims were developed in the course of the initiative, advice given on ways of reducing the risk of repeats and proactive aids to detection installed where repeat incidents appeared to be especially likely; and,
- efforts were made to supply advice packs to those experiencing customer theft and fraud, and to stimulate the development of co-operating groups of businesses where there were clusters suffering similar problems.

Implementation difficulties were addressed through regular meetings of the local multi-agency advisory group.

Commercial burglary problems were monitored through regular police provision of data on local rates and a comparison with those in previous years.

Provision for outcome evaluation was built into the initiative from the start. A second sweep of the local commercial victimisation survey was conducted at the end of the project (in September 1997), two years after the first. Comparison of the findings of the two sweeps comprises the main source of data on crime pattern changes following the introduction of SBCI. In the case of the commercial burglary aspect of the initiative, however, use is also made of recorded crime figures on non-domestic burglary both in the target areas and beyond to compare crime trends.

The main findings on change in crime patterns were as follows:

- commercial crime overall fell substantially;
- commercial crime rates fell significantly across all crime categories except customer theft;
- the rate of non-domestic burglary fell at about twice the rate in the target areas as in the remainder of the force;
- the fall in non-domestic burglary in the compact Leicester city-centre police division matched that for the specific beats in which the initiative operated;
- the concentration of crime overall on the relatively highly victimised was not lessened;
- the concentration of burglary on a small minority of highly victimised businesses was not lessened;
- those businesses which had had significant input from SBCI did not experience greater reductions in crime than those with relatively little contact, though in relation to burglary in particular, full implementation may have come too late for any measurable impact to be felt;
- experience of high rates of victimisation, overall and for individual offence categories, in sweep 1 was an indicator of somewhat heightened risk in sweep 2; but,
- the vast majority of heavily victimised businesses in sweep 1 were not highly victimised in sweep 2, and most of the highly victimised in sweep 2 had not been highly victimised in sweep 1; and,
- there appeared to be some migration from chronically victimised businesses in sweep 1 to similar businesses nearby.

The main conclusions drawn from the evaluation are that:

- crime against commercial premises can be reduced;
- commercial crime rates are extremely high by household standards, and warrant

sustained preventive attention;

- the concentration on high rates of repeat victimisation found for other crime and victim types and the arguments in favour of focusing on repeats in preventive work hold for commercial victims also;
- quick action to reduce risks amongst frequently victimised businesses could play an important part in interrupting series of offences, but this will require good quality data and facilities for analysis (which Leicestershire Constabulary has);
- where highly victimised premises are identified, it is advisable to target nearby similar ones to try and pre-empt crime migration to them;
- establishing shop theft, abuse and fraud risk reduction partnerships amongst small businesses faces great difficulty – the problems appeared to be treated as a normal aspect of business life, and very little headway was achieved in this aspect of the initiative despite substantial effort;
- a commercial crime prevention initiative can achieve significant reductions by heightening sensitivity to crime risk in a small area; and,
- further research is needed to understand better what switches businesses on to high levels of victimisation, and what switches them off.

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1. Introduction

The Small Business and Crime Initiative (SBCI) was a three year demonstration project funded by the NatWest Bank Charitable Trust. It was led by John Burrows of Morgan Harris Burrows (MHB), and managed by Tony Holden of Crime Concern, which has also provided consultancy. The Head of the Police Research Group, Gloria Laycock, was involved throughout, providing advice on project design and evaluation, and on ways of disseminating findings. The aim of the initiative was to reduce crimes against small businesses.

The rationale for the project lay in the accumulating research evidence that small businesses are chronic victims of crime, and that this crime can jeopardise their economic viability (Ekblom, 1988; Hibberd and Shapland, 1993; Mirrlees-Black and Ross, 1996; Tilley, 1993). The project also aimed for the first time in one piece of work to estimate and address significant crimes against small businesses from all sectors. There has been relatively little systematic evaluation of initiatives aiming to reduce crime against small businesses (Felson and Clarke, 1997; Burrows, 1997). It was agreed, therefore, that a demonstration project with provision for evaluation built into it from the start would be useful in exploring further the problem of crime against small businesses, and ways to address it.

Two target areas were selected for the initiative, both within Leicester[1]. The first, Belgrave, lies to the north of the city centre. The local population is predominantly of Asian extraction, and the area also functions as a major shopping and cultural centre for those in the region with roots in the Indian subcontinent. The second, the West End, lies to the south-west of the city centre. It is culturally and ethnically more mixed and has been the beneficiary of City Challenge funding. Both areas include a significant transient student population as well as longer-term local residents.

[1] *There were various potential sites. Leicester was chosen because support for the initiative was high there, and because the two areas offered a diverse range of small businesses.*

A small team of full-time staff was established to run the scheme. Paul Graham was seconded by Leicester City Council to head the team, as co-ordinator. Geoff Taylor, Gill Wheelwright and Charlotte Bilby were also members, Charlotte replacing Gill in March 1997. A steering committee, chaired by NatWest staff, and comprising MHB, Crime Concern, the Police Research Group, the project co-ordinator, the City Council and Chambers of Commerce, met quarterly (on average) and had general oversight of the project. A local strategy group, chaired by John Burrows and including project staff, Crime Concern, Nottingham Trent University, the police, the city council and the local Chamber of Commerce, met more frequently to advise on, and co-ordinate, local activity.

SBCI adopted a 'problem-solving' approach (Ekblom, 1988; Hough and Tilley, 1998; HMIC, 1998). This begins with a careful analysis of the size and nature of the problem. On the basis of this, a strategy is devised to deal with the issue. The strategy is then implemented. Monitoring continues. Eventually outcome-evaluation is undertaken to find out whether the strategy has delivered its promised benefits, and what lessons for practice and policy can be elicited, to be incorporated into future work. The project drew particular inspiration from the Kirkholt Burglary Prevention Project (Forrester *et al* 1988, 1990) in choosing small, manageable project areas for detailed study, and paying particular attention to repeat victimisation.

This report describes the findings of the outcome-evaluation, in this instance undertaken by Nottingham Trent University independently of (though with co-operation from) initiative staff.

2. Strategy development and implementation

Given the approach adopted by SBCI, we describe it in terms of the stages involved in problem-solving.

a) Data collection

The early months of the project were devoted to collecting and analysing data to establish the extent and nature of crimes against businesses in the target areas.

Since there was no reliable list of all businesses in the two target areas[2], SBCI began by creating a list of them. This was done by the team simply walking through all the streets and noting business-addresses. At the same time, adopting principles of targeted crime prevention for local areas (Shapland *et al*,1994), data were collected about the immediately observable features of the business which might be expected to affect potential offenders' decisions to commit crimes there. These included, for example, ease of escape and occupation of neighbouring premises. In all, 1,381 businesses were identified, 680 in Belgrave and 701 in the West End.

Using the list of businesses identified, a face to face commercial victimisation survey, based on the Home Office Commercial Victimisation Survey (CVS) (Mirrlees-Black and Ross, 1996), was conducted in September/October 1995 (Wood *et al*, 1997; Hopkins and Tilley, 1997). This attempted to gauge the extent of the business crime problems experienced in the two areas, their costs, efforts currently being made to deal with the problem, and so on. Considerable efforts were made to conduct an interview at every business in the two areas. Substantial publicity was given to the start of the project, in part because of the innovative nature of the work being planned, and in part as an effort to maximise responses to the survey. Particularly significant was a visit by the Princess Royal in September 1995, which was accompanied by extensive positive media coverage. There were 894 interviews completed in all, a response rate of 65% across the two areas.

b) Data analysis

Data never speak for themselves. They require careful, systematic and intensive interrogation if useful findings are to be drawn out. Eliciting robust lessons is skilled and time-consuming work. Initial results for planning purposes became available in early 1996, but the full analysis, from what was a pioneering comprehensive local business victimisation survey, was not published until 1997 (Wood *et al*).

[2] *This is commonplace, and not in any way peculiar to Leicester There is, to our knowledge, no fully reliable and up to date register of all businesses for any area. It is, in practice, difficult even walking the streets to identify every business unequivocally. For example, some businesses may not advertise themselves as such from outside; in other cases it can be difficult to determine whether a business has ceased trading or is simply closed; and in multiple-occupancy buildings it is often hard to distinguish all the separate concerns operating there.*

The basic findings of the 1995 SBCI survey were consistent with previous research, in establishing that, over the previous year:

- a very high proportion of businesses had been a victim of one or more crimes (75%);
- overall incidence rates were high (businesses suffered on average 3.5 incidents, and those victimised once or more an average of 5.3);
- some businesses suffered especially high levels of victimisation (5% of businesses suffered 34% of the more serious incidents);
- violence and abuse were concentrated in a small number of businesses (3% accounted for 81% of incidents of violence); and,
- burglary also tended to be concentrated in relatively few businesses (17% accounted for 69% of all incidents), and repeats tended to occur relatively soon after an incident.

The SBCI survey was the first major piece of work in Britain to cover all business types. The Home Office Commercial Victimisation Survey had included only manufacturers and retailers. Some significant sector variations in prevalence were found, for example:

- more manufacturers and wholesalers suffered transport losses (35% and 36%) than retailers or service providers (22% and 19%);
- customer theft was most common amongst retailers (35%) compared to other sectors (between 3% and 12%); and,
- a higher proportion of retailers and service providers suffered violence (7% and 9%) and abuse (24% and 18%) than wholesalers and manufacturers (3% and 1% respectively for violence, and 11% and 14% for abuse).

c) Strategy development

On the basis of the data analysed it was decided to focus preventive efforts on three main areas:

- *chronically victimised businesses – those suffering ten or more incidents, excluding the more commonplace incidents of fraud and shop theft*. Here, targeted visits by Crime Prevention Officers and SBCI staff were planned, to make risk assessments, review security and identify any management practices that would reduce risk;
- *businesses subject to repeated burglary*. Here, speedy referral from the police to the SBCI was called for to assess the risk of revictimisation and implement tailored graded measures to reduce it; and,

- *businesses most severely affected by customer theft, abuse and violence*. Here, 'fact packs' were circulated to relevant businesses, and a problem-oriented, hot-spots approach was adopted in relation to clusters of frequently victimised premises.

d) Implementation

Tackling the chronically victimised

Forty-nine chronically victimised businesses were identified in the 1995 SBCI survey. All were contacted. Some were not visited, for example because problems had already been addressed, or had significantly diminished or advice had already been received from a Crime Prevention Officer. Twenty-three were visited by December 1996, with a view to implementing new preventive measures. Nineteen additional businesses were visited as chronic victims following police referral.

Amongst the 42 businesses visited, 28 were receptive to the suggestions that were made to them to reduce their risks. There was, however, a minority of 14 businesses where little headway could be made[3]. A little money was made available to encourage businesses to implement suggested measures. The aim of the project however, was to find ways of addressing business crime problems that did not depend on the short-term injection of special grants, since the hope was to discover widely transposable lessons not dependent on soft funding.

[3] *According to the lead officer dealing with this part of the project, there were various reasons including: lack of interest; the fact that the Crime Prevention Officer had already attended and given advice; discovery that the problem now appeared to be less serious than was evident at the time of the survey; and, that the business had already attempted to deal with the problem.*

Reducing repeat burglary

There were initial difficulties in achieving quick and automatic referrals to SBCI. These were partly to do with the Data Protection Act, which precluded details of individual businesses being passed on without their agreement. This aspect of the problem was largely overcome by contacting the premises identified for the 1995 survey (but still excluded new businesses set up after that piece of work). There were also additional teething troubles in achieving routine referral from the police. The problems had been significantly ameliorated by July 1996, when work began on this aspect of the project, but were not fully sorted out until May 1997.

Similar programmes dealing mainly with residential burglary have referred to past experience of burglaries as the dominant method for determining the nature and grade of response (as in the Huddersfield repeat victimisation prevention programme, Anderson *et al*, 1995; Chenery *et al*, 1997). Because obtaining such information is more difficult in respect of commercial burglary (both from police

records and because past history may not be known by the business contact when an incident is reported), a check-list was initially devised to try to estimate the likelihood of repeat burglaries (see Annex A). Where it was concluded that there was a very high risk of a repeat, measures were to be introduced to try to effect a detection (including, as deemed appropriate, temporary silent alarms with direct lines to the police, covert CCTV, forensic traps designed to obtain footwear marks, and a hidden movement detector which would trigger an audible alarm). Where the risks of a repeat were not found to be particularly high, the decision was simply to furnish advice on ways of improving security.

In the event, the instrument devised to calculate risks of repeats was found less useful than had been hoped. Overall scores tended to concentrate across a small band, which made it difficult to discriminate clearly those at significantly greater or lesser risk. It was decided eventually to use the risk assessment instrument as a guide, and to depend on common sense in deciding what measures to introduce. Though the rate of repeat victimisation is very high for commercial premises, there are relatively few of them and hence it was possible to make assessments without relying on a mechanical check-list.

In the course of the project, innovations were made in the technology used to try to increase the risks to offenders along the general lines indicated. Experience led the SBCI officer co-ordinating this part of the programme (Geoff Taylor) to conclude that the nature and management of individual businesses was important in deciding exactly what measures, if any, could sensibly be put in place. Standard packages were not appropriate in their differing circumstances. For example, in one small business in which a silent alarm was fitted, problems were encountered where the manager was apt to want to return to the premises for some reason in the evening. He would forget he had activated it and find himself confronted by officers at his door! All the covert detection measures required co-operative action by the businesses, and they varied in their ability and conscientiousness in managing them. There were also occasions where it was suspected that a worker in the business was in league with or was known to the burglars, which of course undermined the potential for catching them where the offenders heard of the measures being introduced. The project worker had to make fine judgements about conditions in which measures aimed at detection could have any real prospect of success.

Reducing customer theft and violence amongst those most affected

Locations of customer theft and violence were mapped, and efforts made to identify clusters of premises which might work co-operatively to provide mutual support and protection. Information packs were distributed widely to try to raise awareness of what businesses could do to reduce their own risks.

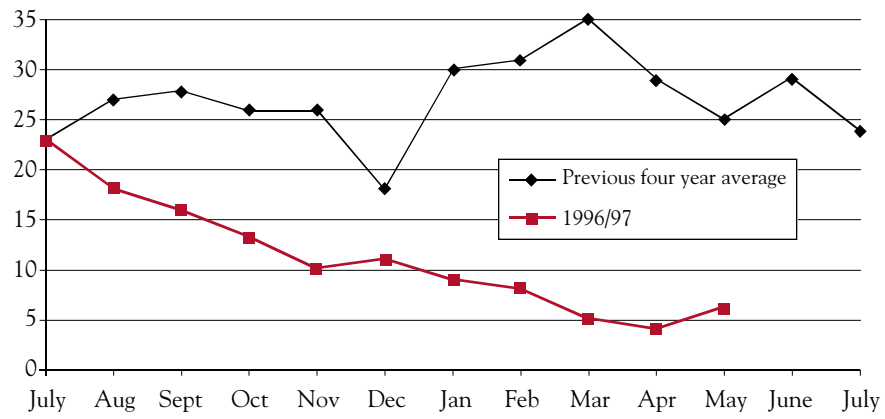
Early efforts to address customer theft and violence were not encouraging. The small businesses which it was hoped would work collectively often proved reluctant to do so, according to project workers. Pride – leading to reluctance to concede that the business was unable to deal with the problem on its own; competition between the businesses; the priority attached to short-term economic survival; and a widespread sense that nothing could be done about the issue (it was 'just part of business life'), were thought to hinder the formation of co-operative clusters. Where local business leaders could be identified, they were more effective in mobilising action. Where written advice was provided, it was demoralising, according to SBCI staff, sometimes to leave premises, having handed over an information pack, to the unmistakable sound of it dropping into a rubbish bin.

e) Monitoring

The processes involved in implementing the planned measures were continuously monitored. Where major difficulties were encountered, as with burglary referrals from the police, these were referred for discussion to the local strategy group for suggestions for their resolution.

It was more difficult to monitor emerging crime trends, though this was undertaken in regard to commercial burglary. Given the 1995 SBCI survey finding that well over 80% of commercial burglaries were reported to the police, these data appeared to be reasonably reliable. Data were tracked, with co-operation from the police in providing the information. The information obtained suggested strongly that the burglary aspect of the programme was being a resounding success, as shown in Figure 1, which relates specifically to commercial burglaries in the Belgrave area.

Figure 1: Belgrave area – business burglaries



f) Feedback and adjustment

It is clear that aspects of the programme were adjusted in the light of experience gained during implementation, as with the decision to abandon dependence on the pro-forma to assess risk of future burglary. It is fully to be expected in demonstration projects of this kind, where new approaches are being tried, that some apparently promising avenues will prove to be less successful than had been hoped, and that new measures and ways of working will take time to bed down. It is to SBCI's credit that the programme provided for lessons to be learned and adaptations to be made in its course, even though these were sometimes painful.

g) Evaluation

The rest of this paper comprises the results of the independent overall outcome-evaluation, provision for which was built into the programme from the start. Including evaluation in this way was designed to find out what had been achieved, what had been learned, and what next steps might be appropriate in effecting advances in understanding and controlling crimes against small businesses.

3. Evaluation outcome data

Data on project outcomes were obtained from two sources, from comparing two sweeps of the victimisation survey and from recorded crime data.

First, in September 1997 a second census of businesses in the two target areas was undertaken (sweep 2). Interviews were conducted with 965 businesses, a response rate again of 65%[4]. Questions identical to those asked in the 1995 survey dealt with experiences of crime and abuse. Other identical questions were asked about losses incurred and fear of crime. For some analyses we have used an 'embedded panel', comprising those businesses where interviews were achieved in both sweeps 1 and 2. There were 483 of these, and it is possible to directly compare their patterns of victimisation. A few additional questions were also asked specifically for the evaluation. The findings from the second survey were compared with those from the first as one measure of impact. Because we have identified specific targets for the work of SBCI, we have been able to use internal comparisons of changes to measure impacts, rather than the highly problematic use of external 'controls' more conventionally used, though we do make some modest comparisons with background recorded crime trends in table 7.

Second, in relation to commercial burglary we have tried to make use of police data. This has great potential advantages, since the first SBCI survey found that 86% of commercial burglaries are reported to the police (the CVS came out with a similar reporting rate of 85%: 93% for those with entry, and 75% for attempts). The available data, however, have to be interpreted with great caution. There are well-known problems with all police recorded crime data, and some particular ones with those relating to the commercial burglary at issue here. The police are not required to, and generally have not tended to distinguish commercial burglary from other non-domestic burglary. Thus burglary of garden sheds, schools, hospitals, government buildings, village halls and so on are all swept in with commercial burglary into the recordable offence, 'non-domestic burglary'[5]. The police did separate commercial from other non-commercial non-domestic burglaries in the Belgrave area during the SBCI programme, as part of their contribution to the programme. It was not practicable, however, to disaggregate the data more widely than this, so in this report the data used referred to non-domestic burglary as a whole, of which commercial burglary is a sub-set[6].

[4] *In the business audit for sweep 2, 1,489 businesses were identified, 108 more than in the sweep 1 audit. This may be because there were more businesses operating, though because of difficulties (mentioned in note 1) in identifying operating businesses this is not necessarily so. We have checked that victimisation in sweep 1 is not a predictor of participation or non-participation in sweep 2, and that victimisation in sweep 2 is not a predictor of participation or non-participation in sweep 1.*

[5] *Moreover, some of these have very high repeat rates. See Burquest et al (1992), Bowers and Hirschfield (1998).*

[6] *Leicestershire Constabulary has inaugurated a new and highly sophisticated crime system since the start of the SBCI programme. This effectively became operational in April 1997, and does indeed enable different targets within non-domestic burglary to be distinguished. It is possible not only to separate out commercial burglary, but also to distinguish differing types of commercial premises. This system was, however, introduced too late for us to use the data for our evaluation purposes.*

4. Results

The working hypothesis for the programme was that a problem-solving project in a small area will be able to identify and diagnose major crime problems experienced by businesses and devise effective ways of reducing them without significant direct financial help to those businesses. Let us consider the evidence.

Overall crime pattern changes

In looking at crime pattern changes, we distinguish between 'incidence', 'prevalence' and 'concentration'. We are most accustomed to seeing figures relating to 'incidence'. These refer to the number of incidents experienced within a given population. Here we give the rate per thousand possible victims. 'Prevalence' refers to the number of potential victims which actually are victimised. Again, we give rates per thousand possible victims. There is a difference between incidence and prevalence rates because some victims suffer more than one offence. They are repeat victims. We use the term 'concentration' to refer to the average number of incidents experienced by each victim.

Table 1 shows the changes in crime rates for all offence categories with an initial incidence rate of at least 400 per 1,000 businesses, except shop theft which is omitted here because a large proportion of victims were unable to assess the frequency of offences[7]. The issue of shop theft, and changes in rates of it, is addressed below.

What Table 1 shows, in the first column, is that incidence rates fell substantially across all volume crimes for which realistic estimates could be made. This is clearly good news for the business population in the two target areas. When the incidence rate changes are decomposed into changes in prevalence and concentration, we find that they were generated in varying ways. In the case of abuse, the change was effected exclusively by a fall in concentration, that is in the role played by repeats. For burglary, the reduction is mainly explained by a fall in prevalence[8]. For criminal damage, it was produced by a fall both in prevalence and in concentration. For fraud, the impact on incidence from a reduction in prevalence is counterbalanced by a large increase in concentration. The significant fall in transport losses is fully explained by a massive fall in prevalence, qualified by a slight increase in concentration. Finally, when all offences are combined (excluding shop theft) we find a large drop (by a third) in 'incidence', which results from a fall in both 'prevalence' and 'concentration'.

It is possible that the high profile presence of the SBCI increased the general sensitivity of businesses to crime and/or sensitised prospective offenders to increasing attention to crimes against businesses. It seems unlikely that the SBCI on its own changed business practices. It does not seem to have penetrated

[7] *In sweep 2, two-fifths did not feel able to make an estimate. Moreover, where respondents had too many incidents to recall, they gave rough estimates – say 'weekly' – which do not lend themselves to ready, accurate aggregation.*

[8] *Obviously, for any number of incidents in a population sheer chance may lead the same event to affect the same victim more than once. The more events in the population the greater the probability of chance repeats. Where, as here, the incidence falls, we would also expect concentration to fall. Hence small falls in concentration with a fall in incidence are not of any great significance. For mathematical methods of calculating expected repeats see Trickett et al (1992) or Tilley (1995).*

sufficiently to do so. In sweep 2 less than 20% recalled any direct contact with the SBCI, and when asked about the project very few could remember hearing of it through the mass media[9]. It may, however, be that local offenders were better tuned into efforts to make their lives more difficult. We have no information on this.

[9] *The most common vehicle for hearing about the project was through local newspapers, from which 10% had heard about it.*

Table 1: Prevalence, concentration and incidence for volume crimes, whole sample

Offence	Incidence			Concentration			Prevalence		
	S1	S2	Ch.	S1	S2	Ch.	S1	S2	Ch
Abuse	736	549	-19	4.5	3.6	-20	164	168	+2
Burglary	735	433	-41	1.8	1.7	-6	402	256	-36
Criminal damage	464	295	-36	2.8	2.1	-25	218	163	-25
Fraud	773	642	-17	2.7	3.5	+30	289	181	-37
Transport loss	430	248	-42	1.9	2	+5	228	123	-46
All	3540	2390	-33	4.8	4	-17	740	598	-19

Note 1: Prevalence and incidence rates are given per thousand businesses interviewed, 'Ch.' shows percentage changes.
Note 2: 'All' here excludes shop theft.

Taking the panel sample we have also looked at the numbers of respondents whose crime experiences have worsened, improved or remained the same between sweeps 1 and 2[10]. Table 2 shows that for all crime categories, excepting abuse, the numbers with a reduced problem exceeded those with an increased problem. For all crime (excluding customer theft and fraud), burglary, and transport related crime, the numbers of those with a reduced problem were at least twice those with an

[10] *The data here are calculated from tables A1 to A6, below The logic of these quite complex tables is explained in Annex B.*

Table 2: Panel sample comparisons of crime problems between sweeps 1 and 2

Crime type	Same	Less crime	More crime	Ratio of less to more
Abuse	351	60	70	0.9
Burglary	246	159	78	2
Criminal damage	340	86	57	1.5
Fraud	298	117	68	1.7
Transport loss	337	101	45	2.2
All	232	169	82	2

Note: 'All' excludes customer theft and fraud, in accordance with SBCI definitions of what to include in identifying chronic victims.

increased one. This is clearly further good news.
The fall in actual crime rates was accompanied by consistent reductions in concern about crime. Table 3 shows that in both project areas fewer businesses were defining local problems as serious or very serious. Across all crime-related issues asked about – crime, vandalism, litter etc., youths hanging around, drinking on the

Table 3: Percentage of respondents defining problems as 'serious' or 'fairly serious' in sweeps 1 and 2

Local problems	West End		Belgrave		Both areas	
	S1	S2	S1	S2	S1	S2
Crime	62	28	75	57	69	42
Vandalism	48	23	56	39	52	31
Litter/flyposting/graffiti	46	25	45	40	46	32
Youths hanging around	28	16	54	49	41	32
Drinking on the streets	24	17	24	22	24	19
Drug dealing	9	4	26	13	16	9

streets, and drug dealing – this was the case.

In relation to personal concerns about crime, again the survey data show consistent good news. Table 4 indicates that respondents' work-related worries about both personal crime (racial harassment, sexual harassment, physical attack) and property crime (theft of possessions, leaving car at or around the premises) had consistently

Table 4: Percentage of respondents 'worried' about crime at work

Worries at work	West End		Belgrave		Both	
	S1	S2	S1	S2	S1	S2
Leaving car at/around premises	65	38	63	56	64	47
Physical attack	46	30	51	41	49	36
Theft of possessions	45	22	39	35	43	28
Racial harassment	11	6	15	11	13	9
Sexual harassment	9	3	7	4	9	3

lessened in both project areas.

In regard to overall changes in crime and its impact, let us turn finally to financial losses incurred by businesses. Table 5 compares the second sweep findings for losses with those found in the first sweep, as reported in Wood *et al* (1997).

Table 5: Financial losses arising from crime (in pounds)

Offence	Highest incident		Average / incident		Average / victim	
	S1	S2	S1	S2	S1	S2
Fraud	60,000	250,000	544	1,969	862	3,293
Burglary	15,000	50,000	1,158	1,662	1,613	2,414
Staff theft	3,000	25,000	414	1,289	560	1,706
Transport	30,000	6,000	990	417	1,346	632
Criminal damage	4,000	10,000	382	456	569	600
Robbery	10,000	2,300	606	268	656	381

It is important to realise that these data refer only to those who were able to make an estimate of their losses (see Mirrlees-Black and Ross, 1996 for a discussion of the limitations of premises-based surveys in relation to crime costs). The figures we have do not, thus, comprehensively cover all losses from crime in either sweep. They also refer to direct losses, rather than costs of crime. The latter would include expenditure on security provision, insurance, staff absence following incidents, loss of trade, etc., and would need to take account of money refunded from insurance following incidents. We make no effort here to calculate net costs for the purpose of the evaluation, though the SBCI report does deal with this issue in relation to the first sweep (Wood *et al*, 1997).

What the losses data show is that in both sweeps there were occasional very high loss incidents. The changes in average loss per incident and per victim can result from the presence of a small number of very high loss incidents in either the first or second sweep[11]. If we sum all losses in the categories of crime shown in table 5 we find that they amount to £1,111,534 in sweep 1 and £1,223,535 in sweep 2, an average of £1,243 per business in sweep 1 and £1,268 in sweep 2. If we disregard the top losses in each crime category in both sweeps, the total loss for sweep 1 comes to £989,534 and for sweep 2 to £880,235. Here, the average losses per business come respectively to £1,107 and £912 for each sweep. The difference between the two ways of looking at average losses follows mostly from the one massive loss of £250,000 through fraud in sweep 2. Overall, the losses

[11] *Wood et al (1997) in their report of the first sweep make the same point. Whilst in that report it is said that some unusual very high cost incidents are omitted from the analysis, in the event they were not. We also included all incident costs in table 5 to allow valid comparison with the published SBCI report findings. The figures presented take the arithmetic mean of losses per incident and per victim. The median (mid-range) figures are more stable, avoiding the effect of the very large losses. For burglary the median figures are £500 for both sweeps, for criminal damage £200 and £150 respectively, for staff theft £90 and £100, for robbery £125 and £50 (the largest proportional variation), for transport losses £300 and £200, and for fraud £40 and £50.*

data suggest rather little change between the two sweeps. Crime continues to generate high losses in the target areas[12].

The data presented here to describe the overall changes in crime experience in the target areas show a falling crime rate and a matching fall in concern over crime. It is at least plausible to suggest that these are causally related – less crime and presumably less news of crime for those working in businesses reduces their levels of anxiety about crime and the prospect of being victimised.

We turn now to those crime issues which were specifically addressed by SBCI. This will help us adduce evidence as to whether the overall improvements in the crime situation for businesses in the two target areas can be attributed to SBCI.

Chronic victimisation

Because a few businesses experienced a very high and inestimable number of shop theft and fraud incidents, rough estimates could have an overwhelming and potentially misleading impact on the figures for chronic victimisation. For the purpose of the evaluation, therefore, we have looked at chronic victimisation, excluding these offences.

The overall patterns of chronic victimisation have not changed markedly from sweep 1 to sweep 2.

Taking all offences covered in the survey except shop theft and fraud, we find that:

- In sweep 1 the most victimised 5% of businesses suffered 32% of all incidents, with at least 12 incidents each.
- In sweep 2 the most victimised 5% of businesses suffered 33% of all incidents, with at least 11 incidents each.

- In sweep 1 the most victimised 10% of businesses suffered 46% of all incidents, with at least 8 incidents each.
- In sweep 2 the most victimised 10% of businesses suffered 43% of all incidents, with at least 7 incidents each..

- In sweep 1 the most victimised 15% of businesses suffered 55% of all incidents, with at least 5 incidents each.
- In sweep 2 the most victimised 15% of businesses suffered 51% of all incidents, with at least 5 incidents each.

[12] *It is difficult to reliably calculate changes in losses overall. We are not confident in the quality of the data here. However, if we assume that the non respondents' crime experience reflects that of the respondents, and if we also assume that the average (mean) known losses from crimes reflect the losses where estimates could not be given, taking a mid-point count of businesses from the sweep 1 and sweep 2 audits we find the following: losses from burglary went down from £1,221,000 to £702,000, and for transport losses from £611,000 to £148,000; and losses went up from fraud from £603,000 to £1,814,000. Another method of calculation is to take all crime together, and to discount the largest (possibly exceptional and distorting) losses in each category in each sweep. This produces a fall in overall losses of £280,000 per annum from sweep 1 to sweep 2.*

Looking at the proportions of offences suffered by those most highly victimised, we find:

- In sweep 1, 12 businesses suffered 20 or more incidents.
- In sweep 2, 11 businesses suffered 20 or more incidents.

- In sweep 1, 37 businesses suffered 11-19 incidents.
- In sweep 2, 22 businesses suffered 11-19 incidents.

There is, thus, overall not much change. There were only small differences amongst those suffering high, but not extremely high, rates of victimisation.

In order to examine the role that SBCI might have played in affecting chronic victimisation, we look in table 6 in a little more detail at the premises suffering ten or more incidents. Separating those visited by SBCI from all those with ten or more incidents, we find the following.

- Sweep 1 total: seven of the 49 with ten or more relevant incidents in sweep 1 had shut down by sweep 2. Of the remaining 42, 29 were interviewed again in sweep 2. Whilst their total incidents for sweep 1 had been a massive 675, the number had fallen to 94 in sweep 2 – a drop of 86%; and,

- For those visited: 23 of the 42 businesses visited as part of the chronic victimisation element of SBCI came from the 49 with 10 or more incidents. Of these 4 had shut down by sweep 2. The fall in total incidents amongst the 13 visited and also interviewed in both sweeps, was 80% (from 228 to 45).

Further distinguishing those where an intervention followed from the visit from those where none did so, numbers of respondents interviewed in both sweeps become very small, but the following is found. For those:

- visited with intervention (six interviewed in both sweeps) there was a 73% fall in all incidents; and for those

- visited with no intervention (seven interviewed in both sweeps) there was an 88% fall.

Taking now the 26 which received no SBCI visit:

- three had shut down and 16 were interviewed also in the second sweep. They experienced an 89% fall in their total number of incidents – from 447 to 49.

The last two rows of the table refer to businesses which were identified by the police as chronic victims, rather than through the survey, and were thus also visited as chronic victims.

- For those visited after police referral: amongst the nine (of 19 in all) which were interviewed in both sweeps there was a 61% fall in relevant incidents – from 66 to 26.
- For those visited after police referral/intervention: of the 19 identified and visited measures followed in 16; seven were interviewed in both sweeps, amongst whom a fall of 51% in relevant incidents occurred – from 51 to 25.

Table 6: Chronic victims and SBCI action

Ten or more crimes	Number	Closed by sweep 2	Interviewed in both sweeps	Total sweep 1 crimes	Total sweep 2 crimes	% change
Sweep 1 total	49	7	29	675	94	-86
Visited	23	4	13	228	45	-80
Visited with intervention	12	2	6	123	33	-73
Visited with no intervention	11	2	7	105	12	-88
No visit	26	3	16	447	49	-89
Visited after police referral	19	2	9	66	26	-61
Visited after police referral/ intervention	16	1	7	51	25	-51

What is striking in Table 6 is that the changes in rates amongst those interviewed in both sweeps are so similar for those visited and not visited, and for those where intervention followed a visit and those where it did not do so. It provides no evidence that SBCI direct action, per se, produced distinctive falls in crime amongst the chronically victimised, even though the falls are very dramatic. However, all chronic victims identified in sweep 1 were contacted, and this may in and of itself have had an effect. Indeed, it was the impression of project staff that in some cases the initial SBCI survey itself had sensitised businesses to their levels of victimisation and had prompted them to address the problem before direct efforts by SBCI to help them. Thus, the decision not to visit in some cases followed from the fact that problems had already lessened, or

that action had already been taken, often with advice from the police. It may, thus, be that that SBCI was dealing with the more persistent and problematic chronic victims.

Let us look for a moment at outputs rather than outcomes. Respondents were asked about their use of ten specific crime prevention measures in sweeps 1 and 2[13]. Taking the panel sample, we can compare the numbers of them in each sweep for different subsets of the population. Amongst the whole panel for which we have these data (476) there was a slight increase from an average of 4.7 to 4.8 devices. Amongst the chronic victims interviewed in both sweeps the average number went up from 5 to 5.4. There was some increase within all subgroups identified in table 6. The smallest was found where no visit was made where, within the panel sample of 16, average numbers of security measures increased from 5 to 5.2. The largest increase was amongst those with police referral, where the increase was from 4.9 to 5.8 amongst the panel of 9. This provides some evidence that victimisation stimulates improved security and that the SBCI intervention itself heightened that increased security.

[13] *The ten devices asked about include: intruder alarms; five lever locks; toughened, laminated or wired glass; reinforced doors/door frames; bars/grilles to windows; fake note detector; security lights; safe; shutters; and, internal CCTV*

Let us turn now to the 33 chronically victimised businesses identified in sweep 2. Two had been visited by SBCI. Of the 33, only 16 had also been interviewed in sweep 1. Amongst these, there had been 110 incidents in sweep 1 (including one business which had had 53 of them), and 281 in sweep 2. Only three businesses interviewed in both sweeps had ten or more incidents in each of them.

It appears that there is a changing population of chronically victimised businesses. Annex B shows (and explains) quite complex tables for 'inheritance' and 'transmission' of crime risk, including one relating to all incidents. They show the crime level 'origins' and 'destinations' between sweeps 1 and 2. With regard to all crime (except shop theft and fraud) figure 2 shows the transmission of risk from those 29 businesses with original sweep 1 had high (10+) victimisation rates. It shows their crime rate 'destinations' in sweep 2: three again had high levels of crime; three had moderate crime levels (5-9 incidents), nine had relatively few incidents (2-4), and 14 were rarely victimised (0-1 incident).

Figure 2: Transmission of chronic victimisation risk from sweep 1 to sweep 2

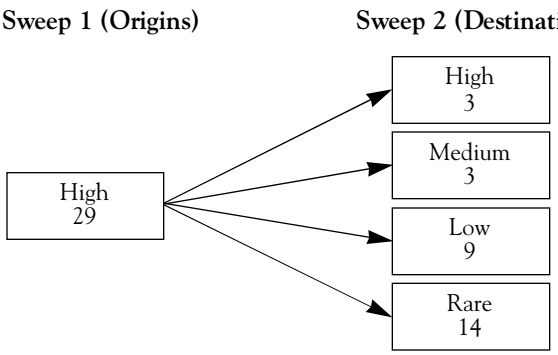
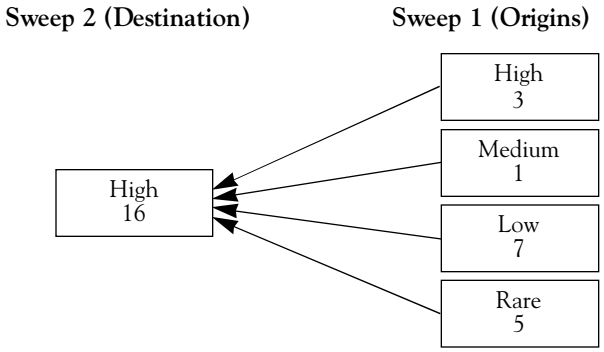


Figure 3 on the other hand looks at the risk-level 'origins' of those 16 whose destination in sweep 2 was to suffer high levels of crime: three had had high crime levels in sweep 1, one had had moderate levels, seven had had relatively few incidents, and five had been victimised only rarely.

Figure 3: Inheritance of chronic victimisation risk in sweep 2 from sweep 1



What these two figures reveal is considerable fluidity amongst the population of highly victimised businesses. Though the numbers are very small, taking only the highly victimised with ten or more incidents, whilst high victimisation in sweep 1 trebles the risk of high rates of victimisation in sweep 2, the unfortunate businesses

affected comprise only a fifth of those highly victimised in sweep 2. The rest are newcomers to high crime experience. This combination of both transmitted heightened risk for the relatively highly victimised and a substantially changing population of the highly victimised holds broadly not only for the overall chronically victimised, but for separate crime categories too, as the patient and persistent reader ploughing through Annex B will find. This is a novel finding, which can only be obtained from a panel of victims. It is not something to which the project could reasonably be expected to have paid attention.

Some of the fall in levels of victimisation of the chronically victimised from sweep 1 to sweep 2 may be explained as a function of 'regression to the mean'. Thus, if extreme cases from a distribution of scores are taken in any study, they tend to fall back towards the mean. The chronically victimised in sweep 1 were, by definition, extreme cases. Yet the size of the swing makes it unlikely that this is the whole story. Indeed, table A1 brings out the general improvement. Questions remain concerning what it is that propels certain businesses to abnormally high crime levels for a while, what brings this vulnerability down, and what agencies can do to stimulate or facilitate falls. In the case of SBCI, whilst we were unable to provide evidence that their specific actions in relation to some businesses had produced distinctive falls, it remains possible that the heightened sensitivity to crime risk brought about by the initial survey and by the publicity engendered by the project had led the chronically victimised to make changes reducing their vulnerability.

In order to try to make some sense of the changing population of chronic victims, we have looked in a little more detail at those in Belgrave. The evidence is not strong, but provides some support for the notion that offending will migrate to an adjacent soft target offering similar rewards, if for some reason offending is rendered more difficult at one site. This new target is then at risk of chronic victimisation – at least for a while. Chronically victimised businesses across the two sweeps appear to be located in small clusters. We located five of these clusters. In one, for example, a supermarket selling alcoholic drinks which was very heavily victimised in sweep 1 had far fewer incidents in sweep 2, but an off-licence fifty yards away in the same small parade of shops had next to no incidents in the first sweep but was one of the most highly victimised in the second. In another cluster, some four businesses within 50 yards of each other experienced very high rates of victimisation in either sweep 1 or sweep 2, and again all sold alcohol. In a third, two businesses facing across the street both sold cheap DIY goods – one was heavily victimised in the first sweep, the other in the second. And so on.

With better information about emerging chronic victims, which might be available from the police if businesses are reporting incidents to them, targeted early interventions might be possible to help pre-empt the emergence of new cohorts of highly victimised businesses. The development of Leicestershire's new and highly sophisticated crime recording system, as well as its force-wide facility for routinely identifying repeat call addresses (which Read *et al* 1997, have found commonly to be businesses) certainly provide foundations in the study sites for the police potentially to learn early of businesses suffering repeat incidents. There may be significant benefits in devising strategies using these facilities to encourage prompt measures preventing businesses from becoming chronic victims. The 19 cases referred by the police during the course of the SBCI initiative may have nipped problems in the bud. The apparent lower fall in incidence rates amongst them may reflect the fact that some of the sweep 2 incidents could have occurred before intervention took place.

In summary, our analysis in regard to chronic victimisation has found that:

- Chronic victimisation has continued to be a problem.
- Nevertheless, chronic victims in sweep 1 experienced falls of between 51% and 86% in incidents experienced.
- While there is little evidence that the specific work of SBCI with individual businesses was responsible for this fall, it is possible that the programme heightened sensitivity amongst businesses and thus contributed to the reduction.
- The population of chronic victims appears to be fairly fluid, with some evidence of switching between similar businesses in small clusters.

Repeat burglar y

Let us look first at the recorded crime data, remembering the caveats about it already mentioned, notably that it refers to non-dwelling house burglary rather than commercial burglary as such. That acknowledged, the fact that the fall for the combined areas is identical to the fall in incidence of commercial burglary as measured by the two survey sweeps in the project areas (41% in both cases), provides some reassurance that each data source is capturing much the same real underlying change.

Table 7 shows the changes in recorded non-domestic burglary, comparing the year before the scheme was launched with its final year. This captures the same period for data collection as the two survey sweeps. Step by step:

- The first row shows that a 40% fall in recorded non-domestic burglary occurred both in the West End project area and in the rest of the police division in which the West End is located.
- The second row shows that whilst there was a fall of 43% in the second project area, Belgrave, there was only an 18% fall in the rest of the division in which Belgrave is located.
- The third row combines the data from the first two and shows that across both project areas there was a fall of 41%, whilst in the remainder of the two divisions, the fall was just 32%.
- The fourth row shows that in regard to the nearest equivalent period of published data on recorded crime (July to June 1996/97), national trends for England and Wales show a fall in non-domestic burglary of just 8% (Povey *et al*, 1997).
- The bottom row shows that in Leicestershire as a whole, excluding East and Central Areas, there was a 17% fall in non-domestic burglary, virtually identical to the fall in East Area outside Belgrave.

Table 7: Changes in recorded non-domestic burglar y

	Non-domestic burglary		
Place	1994-1995 (Sept-Aug)	1996-1997 (Sept-Aug)	% Change
West End	357	214	-40
Central Area (excluding West End)	1,470	886	-40
Belgrave	489	281	-43
East Area (excluding Belgrave)	2,054	1,694	-18
West End & Belgrave	846	495	-41
East & Central Areas (excluding West End and Belgrave)	3,524	2,580	-32
England and Wales (July-June)	579,756	532,531	-8
Leicestershire (excluding East and Central Areas)	6,996	5,804	-17

It appears that, for unknown reasons, the fall in non-domestic burglary in Leicestershire, even where the project was not running and could not plausibly be exerting significant influence, was significantly greater than that in England and Wales as a whole. It is also apparent that East Area, beyond the SBCI target area, performed similarly to the rest of the force. What is clear is that Belgrave and Central Area experienced a substantially greater fall in recorded non-domestic burglary than the rest of the force, which was itself experiencing a much higher than average fall. There does, thus, appear to be something distinctive about the change in recorded non-domestic burglary in Central Area as a whole and the Belgrave, SBCI-targeted part of East Area.

What these data show is that if SBCI had an impact on non-domestic burglary in the West End, its influence is less likely to be through specific interventions provided by the project *per se* than through some mechanism which it triggered for the whole of the Central Area. There are at least two possibilities here. The first is that it altered service delivery patterns, perhaps by the police. The second is that it heightened awareness of burglary amongst potential targets who took more precautions, or amongst potential burglars, who came to believe that commercial burglary would become more difficult in the area. Area-wide spin-off impact is plausible in Central, given that it is a relatively compact geographically confined area. With regard to Belgrave it is much less likely, because East Area is large with a number of distinctive, geographically separate communities, including Melton Mowbray and Oakham, which are market towns operating quite independently of Leicester. Thus, what we may see here is a diffusion of benefit in Central Area, from the SBCI project site to the remainder of the policing Area in which it was located.

Figures 4 and 5 show year on year comparisons of quarterly incidence figures for non-domestic burglary in the target beats and the remaining division respectively in East Area and the West End. The quarters run March-May, June-August, September-November and December-February, to fit in with the September to August years' data collected within the two survey sweeps.

Figure 4: Percentage change on previous year quarter: burglary other for Belgrave

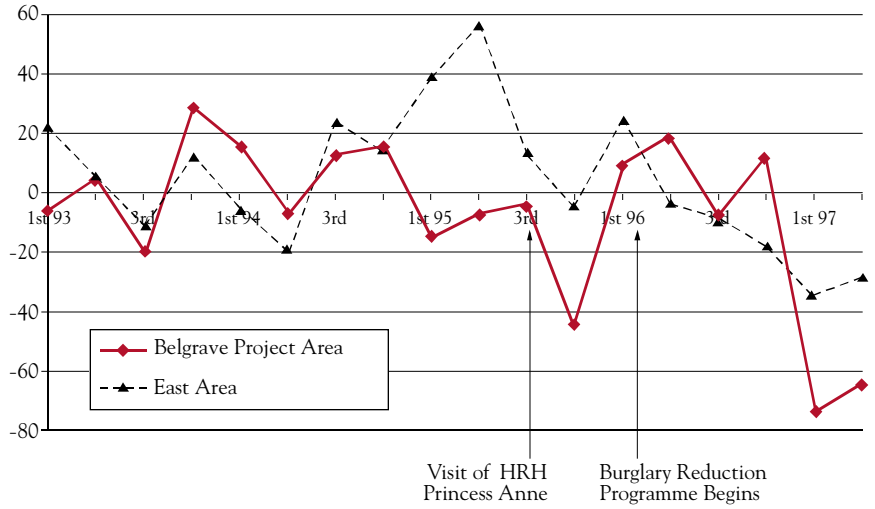
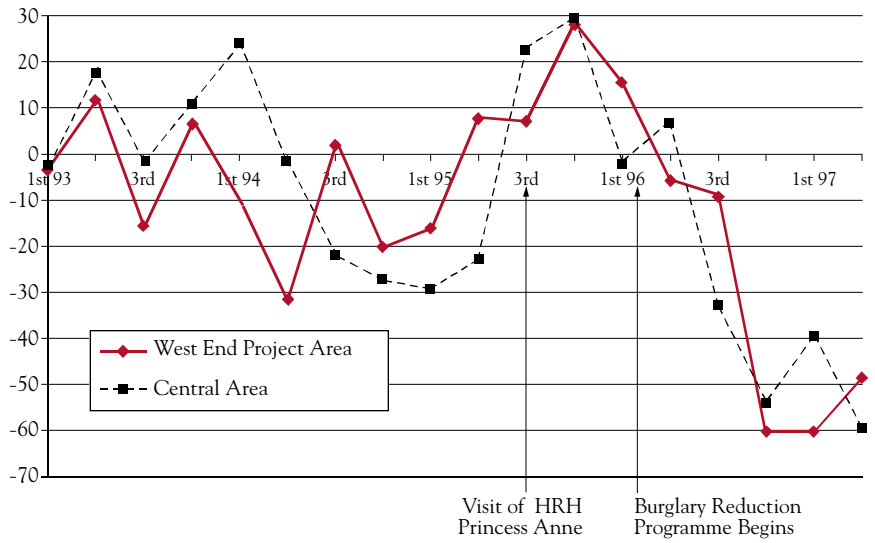


Figure 5: Percentage change on previous year quarter: burglary other for West End



The figures show that for both target areas there has been a very dramatic fall in incidence for non-domestic burglary over the term of the SBCI project. The change patterns in the project areas are similar, however, for much of the period, to those in the remainder of the divisions in which they are located, especially in the case of the West End and Central Area. Belgrave was the project area that most conspicuously outperformed the remainder of the division before SBCI was launched by the Princess Royal.

Let us now turn to the survey data to try to assess in more detail the contribution of SBCI to the falls achieved. Table 8 shows the incidence, prevalence and concentration levels for all burglaries, including those attempted and those completed, in sweeps 1 and 2. It fits with the recorded crime data, which again include all burglaries. It reveals a 41% fall in the incidence rate from 736 per 1,000 to 433 per 1,000, though this lower rate is still very high by the standards of domestic burglary, which was found to be about 83 per 1,000 in the 1996 BCS (Mirrlees-Black *et al*, 1996). If we compare the changes in prevalence and concentration, whose product generates the incidence rate, we can assess their relative contribution to the fall. What we see is that whilst prevalence fell by 36%, concentration fell by only 8%, where a reduction would be expected anyway with a fall in incidence were victimisation to be a matter of chance. The major driver for the fall was therefore the drop in prevalence, rather than concentration which is a measure of the contribution of repeat incidents[14]. Hence, so far as all burglaries go the fall in incidence cannot be directly and immediately attributed to efforts to prevent repeats.

[14] *The SBCI survey report rightly shows that 33% of incidents were suffered by the 5% most burgled premises in the first sweep. In the second sweep the 5% most burgled premises suffered 39% of all burglaries.*

Table 8: Changes in incidence, prevalence and concentration for all burglaries, including attempts

	Incidence (per 000)	Prevalence (per 000)	Concentration
Sweep 1	735	402	1.83
Sweep 2	433	256	1.69
Change	-41%	-36%	-7.7%

Table 9 takes only the completed burglaries, those with entry, and table 10 takes the attempted burglaries on their own. Unfortunately, the data here are partial and not strictly comparable to those in table 8. They are taken from that part of the survey which asks questions about individual incidents, where respondents gave details of a maximum of four. They will therefore underestimate incidence

and concentration in both sweeps. With that limitation acknowledged, what table 9 seems to show with regard to burglaries with entry is that the incidence rate fall is entirely explained by a matching drop in prevalence. Concentration had increased very slightly.

Table 9: Changes in incidence, prevalence and concentration for completed burglaries

	Incidence (per 000)	Prevalence (per 000)	Concentration
Sweep 1	428	313	1.37
Sweep 2	256	184	1.39
Change	-40%	-41%	+1.8%

Table 10 shows the changes in relation to attempted burglary. It reveals that whilst prevalence has decreased substantially, the effect on incidence is muted somewhat by a small *increase* in concentration. This is not necessarily bad news. Attempted burglaries may be considered failed burglaries – they may reflect the successes of efforts to keep prospective intruders out. An increasing concentration here could indicate that repeated efforts to gain entry had failed. Indeed the reduction in the ratio of successful to attempted burglaries from 2.8-1 to 2-1 suggests that there was an increasing fraction of thwarted burglaries.

Table 10: Changes in incidence, prevalence and concentration for attempted burglaries

	Incidence (per 000)	Prevalence (per 000)	Concentration
Sweep 1	156	122	1.28
Sweep 2	128	89	1.44
Change	-18%	-27%	+13%

These overall patterns with regard to changes in incidence, prevalence and concentration may mask significant falls in the numbers of businesses repeatedly burgled. Thus, whereas in sweep 1, 2.7% of businesses (24) had suffered four or more burglaries (including attempts and those where entry was gained), this had fallen to 1.6% (15) in sweep 2; in sweep 1, 6.6% (59) had suffered three or more burglaries, but only 4.2% (41) in sweep 2; and in sweep 1, 17% (155) had suffered two or more burglaries, but in sweep 2 only 11% (102) had done so. Thus numbers

of repeatedly burgled businesses did fall with the introduction of the SBCI initiative, even if -following the fall in prevalence – this did not lead to drops in concentration.

Let us turn to the businesses which were beneficiaries of SBCI burglary-related intervention to see what befell them.

Table 11 tracks through burglary patterns amongst those businesses which participated in both survey sweeps. It takes those burgled three or more times (treated here as the chronically burgled), and it also takes the whole sample of burgled businesses. The data include both attempts and burglaries where entry was gained, and thereby include some cases where preventive success might be claimed.

- The top row (sweep 1 total) tells us that 59 businesses were found to have experienced three or more burglaries in sweep 1. Of these five had closed by the second sweep. Of the remaining 54, 38 were also interviewed in the second sweep. They experienced a 79% fall in numbers of burglaries – from 172 to 36. Of all those burgled in sweep 1, 202 were also interviewed in sweep 2. They experienced a 72% fall in number of incidents – from 390 to 109.
- The second row (Visited) shows what occurred in relation to those visited as part of the programme, distinguishing those which had experienced three or more burglaries in the first sweep from all respondents. Amongst those interviewed in both sweeps there was a fall of 47% for those who had experienced three or more burglaries and of 28% for all those identified as victims.
- The third row (Visited with intervention) shows changes amongst those where intervention took place following SBCI visits. Numbers responding to both sweeps are very small here and data should be treated with great caution. They reveal a 63% rise amongst those who had experienced three or more incidents in the first sweep, and a 33% rise for all those who had been victimised at least once.
- The fourth row (Visited with no intervention) shows changes amongst those visited, but where no SBCI intervention took place. Amongst those interviewed in both sweeps, reductions in incidence of 71% and 50% respectively are found for those who had had three or more burglaries or a least one according to sweep 1.
- Finally, the bottom row (No visit) shows falls of 90% and 83% respectively for those not visited but interviewed in both sweeps, who had respectively three or more or at least one burglary according to the first sweep of the survey.

Table 11: Experience of burglary victims identified in sweep 1

Burgled	Number	Closed by sweep 2	Interviewed in both sweeps	Total sweep 1 burglaries	Total sweep 2 burglaries	% change
Sweep 1 total	=>3 = 59 All =359	5 41	38 202	172 390	36 109	-79 -72
Visited	=>3 = 7 All = 46	0 4	6 31	43 81	23 58	-47 -28
Visited with intervention	=>3 = 3 All = 17	0 2	2 11	8 21	13 28	+63 +33
Visited with no intervention	=>3 = 4 All = 29	0 2	4 20	35 60	10 30	-71 -50
No visit	=>3 = 52 All =313	5 37	32 171	129 309	13 51	-90 -83

These patterns at first sight appear very discouraging – the more intervention, the less success! Yet it must be remembered that the SBCI's burglary work was concerned with those most at risk of burglary. Table 11 indicates that the targets were well chosen. Moreover, some respondents will have implemented measures in the course of the programme, and they may not yet have had time for their full preventive dividends to be realised at the time of sweep 2: police referral arrangements were not fully sorted out till the beginning of the year to which these survey data relate. The SBCI staff also note that some of the planned measures for those deemed at very high risk of repeat incidents require a level of co-operation/ collaboration with the businesses themselves that was not always practicable – setting forensic traps, covert CCTV and autodialler alarms all call for routine action by workers in businesses which can be difficult for a number of reasons to do with trading patterns, management style, and the physical lay-out of buildings (see the discussion above, under 'Implementation').

Table A2, in Annex 2, follows the logic of table A1 in showing overall patterns of risk inheritance and transmission, but this time specifically in regard to burglary. As with the discussion of chronic victimisation more generally, we take the subset of the more heavily victimised in sweeps 1 and 2 and illustrate patterns of transmitted and inherited risk.

Figure 6 shows that only a small number of the heavily victimised in sweep 1 were also heavily victimised in sweep 2, indeed about two-thirds were not victims at all.

That said, one would not expect more than one to be heavily victimised in sweep 2, if prior victimisation did not have any effect on later risk. Hence there is some evidence for transmitted risk.

Figure 6: Transmission of burglary victimisation risk from sweep 1 to sweep 2

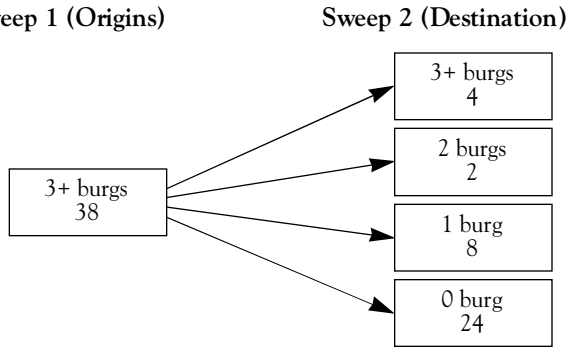
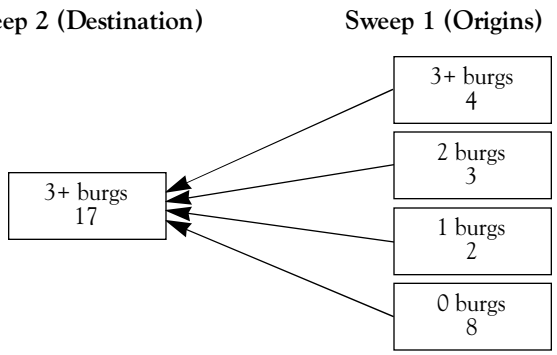


Figure 7 looks at those businesses heavily victimised in sweep 2. It shows that about a quarter had also been heavily victimised in sweep 1, some three times what would have been expected. However, about a half of the heavily victimised in sweep 2 had no incidents of burglary in sweep 1. This again shows inherited enhanced risk for those heavily victimised at sweep 1 at sweep 2, but also that a substantial proportion of the heavily victimised are new recruits. The population of heavily victimised premises appears to be quite fluid. This indirectly supports the view that for this population 'event dependency' plays a large part in producing the pattern of victimisation, i.e. that something triggers a series of repeat crimes against a particular target. It is less clear what that trigger is, or what switches it off. There is also some support for a role for 'risk heterogeneity' in that, presumably because of long term variations in attractiveness to offenders, risks at some premises are transmitted and inherited across time[15].

[15] *On risk heterogeneity and event dependency more generally, see Farrell, Phillips and Pease (1995) and Spelman (1995).*

Figure 7: Inheritance of burglary victimisation risk in sweep 2 from sweep 1



In summary, with regard to the burglary reduction work of SBCI, we find:

- Burglary has fallen substantially in both target areas, and in the whole Central Area in which the West End is located.
- Those repeatedly burgled in sweep 1 have suffered many fewer incidents in sweep 2.
- There is little evidence that SBCI work with individual businesses is uniquely responsible for these falls.
- There is a changing cohort of repeatedly burgled businesses even though some enhanced risk was transmitted from sweep 1 to sweep 2.

Customer theft, abuse and fraud

Both project workers dealing with this aspect of SBCI's work found it very difficult to make significant headway. Despite persistent efforts to engage businesses successfully to create self-help co-operative groups to address these issues, little interest was sparked. Whilst efforts were made to find or define natural clusterings of potentially co-operating businesses, they were rarely there already and there was little interest in forming them.

Progress was made in one Traders' Association in Hinckley Road, a meeting of which SBCI staff attended in late April, 1997. A subsequent meeting of this group in mid-July 1997, right at the end of the project, did consider crime issues. A business watch still operating at the time of writing (February 1998) is a legacy. Despite this one achievement, the conclusion drawn within the project team was that at best there might be scope for building attention to risk reduction into

existing business forums. In the event, starting from scratch in the settings for the SBCI programme had proved too difficult.

Information packs were also distributed, but SBCI staff gained the impression that little attention was paid to them. In the light of this experience, there was no real expectation that the project could have a significant impact on victimisation patterns.

Despite the findings of the initial SBCI crime survey, which indicated quite a widespread problem of customer theft, further contact with businesses led the team to the view that it was taken to comprise a routine cost for most of the businesses affected, and was reflected in, and dealt with, in pricing practices. Moreover, schoolchildren were deemed the most frequent offenders, and it was not generally found that businesses felt that much could be done about it. Much the same was found in relation to abuse, where the existence of rude customers and experience of verbal abuse were found to be seen as part of what was involved in running a business. Given these ways of construing the problems (which may of course not be found within all businesses in all settings or amongst all the staff working in them), problems experienced in eliciting interest and action, particularly where costs might be incurred, are unsurprising.

Changes in customer theft

As already indicated, the customer-theft data on incidence are weak given the large proportion of victims who were unable to estimate the frequency of offences committed against them. Table 12 shows the prevalence of customer theft in sweeps 1 and 2, for differing business sectors. Unsurprisingly, retailing has the highest prevalence rate, and manufacture the lowest. There appears to have been a slight increase overall.

Table 12: Changes in prevalence of customer theft

Sector	Prevalence of customer theft /000	
	Sweep 1	Sweep 2
Retail	347	389
Wholesale	115	170
Services	91	92
Manufacturers	34	63
All	191	209

Concentration figures can be calculated from those businesses where estimates were made of numbers of incidents. These need to be treated very cautiously indeed, since they are likely to omit the most highly victimised, where estimating numbers of incidents will be very difficult. Moreover, it is by no means certain that victims will always know that they have suffered customer theft. A proportion of unaccountable losses may result from undetected customer theft. Table 13 suggests that there was some fall in concentration, except in the services sector.

Table 13: Changes in concentration of customer theft

Sector	Concentration of customer theft	
	Sweep 1	Sweep 2
Retail	5.1	4
Wholesale	3.5	2.1
Services	1.6	4.8
Manufacturers	1.3	1

Changes in abuse

Table 1 (above) provides data on abuse, where a 19% fall in incidence is shown. This was effected by a fall in concentration, qualified by a tiny increase in prevalence. Table A3, compares the pattern of abuse amongst the panel sample from sweep 1 to sweep 2. The conclusions to be drawn from this table are similar to those from earlier equivalents: risk is transmitted in that only 4% of sweep 2 as a whole suffered relatively frequent abuse (four or more incidents), but 14% of those in sweep 1 who had been frequent victims reported being frequent victims again. Nevertheless of those reporting frequent abuse at sweep 2, 44% indicated there had been none in the sweep 1 survey.

Changes in fraud

As Table 1 above shows, there was a 17% fall in incidence of fraud, produced by a substantial decrease in prevalence, qualified by an increase in concentration, a different mechanism from that affecting abuse. The main approach by SBCI here was to distribute advice packs. The data here do not allow us to say with confidence whether or not they played a part in the changing pattern. As with customer theft and abuse, the project team was not optimistic about the likelihood of an impact here.

Table A4 shows the changing experience of fraud for the panel sample between sweeps 1 and 2. It again shows some inheritance of enhanced risk amongst those heavily victimised at sweep 1. Though 7% of all at sweep 2 suffered three or more incidents of fraud, 18% of those who had suffered three or more incidents at sweep 1 suffered three or more again at sweep 2. However, almost half those highly victimised at sweep 2 had not been victims at all at sweep 1. There appears to be a changing population at high risk. This will make targeting advice at the local level very difficult, especially with an offence where reporting rates to the police are likely to be low. That said, of course, on a national scale the efforts to deal with credit card fraud have been an outstanding success in recent crime prevention, and the report of the SBCI survey notes that the prevalent view amongst businesses was in any case that fraud was already being controlled adequately, and hence was to be given little attention (Wood *et al*, 1997).

5. Conclusions

Major findings

- Overall crime affecting businesses has gone down substantially in the course of the Small Business and Crime Initiative, in its target areas.
- Crime-related concerns have declined markedly amongst those working in businesses in the target areas in the course of the initiative.
- There have been marked and distinctive falls in commercial burglary, a key target, in areas associated with the initiative.
- There have been some falls in chronic victimisation, which was a major target for SBCI work.
- There have been smaller falls in abuse and fraud, which were targeted in the initiative, but an increase in shop theft which was also targeted.
- There have been large falls in criminal damage and transport related losses which were not specifically targeted in the initiative.
- The evidence does not suggest that the work of the initiative with individual target businesses – visiting them to help them reduce their risks – played a significant part in effecting the drops in crime.
- The initiative may, however, have played an indirect role in reducing business crime, by raising consciousness about business-crime risks and crime-prevention possibilities in the local area.
- There is some evidence of diffusion of benefits of the initiative in the relatively compact central division in Leicester.

Research lessons

The fairly large panel sample in two confined areas has revealed hitherto unrecognised aspects of business crime and repeat victimisation.

- Most of those experiencing high rates of crime at any point in time have not experienced the problem previously. There is a shifting population of the heavily victimised.

- Those who have suffered high rates of victimisation in one period, however, maintain somewhat heightened risk.

- There is some circumstantial evidence that new repeatedly victimised premises are similar and close to ex-repeatedly victimised premises. Crime prevention would be well served by teasing out further the mechanisms and contexts of target switching to help think through how and where pre-emptive measures might be put in place.

Practice lessons

- The conduct of a well-funded and publicised business crime-prevention initiative, as has happened with the SBCI and support for it from the NatWest Bank Charitable Trust, is a very useful way of raising the profile of the issue amongst key agencies.

- Even with generous funding and initial co-operation from local agencies, conducting a demonstration project faces quite major difficulties in identifying businesses, in collecting good data on crime levels, and in stimulating interest and action amongst businesses and organisations serving them. After three years of hard work, some aspects of the SBCI work were only fully falling into place by the end of the project.

- Since there appears to be a continuing supply of emerging highly victimised small businesses, early identification of candidates for intervention through police command and control data or recorded crime is critical. With regard to the latter, as with other targeted crime prevention, readily available details of victim attributes would be invaluable in informing work.

- Though the project leaves as a legacy one reactivated business association – the business watch deriving from the Hinckley Road Traders' Association – in general stimulating collective responses amongst small concerns to individually minor crime problems is very difficult and prompts questions as to its likely future dividends. On the basis of SBCI experience, it would certainly seem that attempting to seed them from scratch will face huge problems.

- Implementing targeted efforts to apprehend repeat offenders through the pro-active use of forensic science is difficult, but has been found sufficiently promising for the police to have carried on with the work.

Policy lessons

- Crimes against businesses occur at a very high rate, cause significant losses, and affect the quality of lives of those working in them. Yet they are open to crime prevention work. Crime against business has received relatively little policy attention in the past, yet warrants more. Whilst preparing this report, we visited Belgrave in February to look at chronically victimised premises. In the midst of a cluster of them, we found one shop which had closed down, and it gave us our title. Crudely-painted in foot-high letters on the chip-board covering the windows was the message: BUSINESS AS USUAL. Its many resonances highlight the need for further thought and action.

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Annex A: Risk assessment of repeat burglar y victimisation

Contact: ..... **Date:** .....

Premises:. ..... **(period)** ..... **Tel No.** .....

Risk Assessment	Score	Remarks
Previous History: Heavy/Moderate/First	.....	.....
Ease Of Entry: Easy/Medium/Difficult	.....	.....
Target: Cash/Equipment/Other	.....	.....
Stock: Attractive/Moderate	.....	.....
Items Remaining: Much/Little/NA	.....	.....
Replacement: Urgent/Yes/No	.....	.....
Response: Considered or Taken	.....	.....
Empty Property: Yes/No	.....	.....
Simple Access: Yes/No	.....	.....
Attempt Only: Yes/No	.....	.....

Other Factor s .....

Remedial Step s .....

Score Total ..... **Percentag e** .....

Gut Reactio n .....

Intervention Points

Point of Entr y	Same always/usually/varies/first time
Time on Premises	Long/Brief as poss/smash & grab with no entry
Alarm system	None/Bell-only/Monitored
Target hardening	None or basic/Adequate/Comprehensive
Sentinel	OK/Unsuitable: reason .....
Covert CCTV	OK/Unsuitable: reason .....
Advice	HO Crime Prevention Literature/ Smokecloak & Probe FX letter

Annex B: Transmission and inheritance of crime risks: supplementary tables

Table A1 shows 'inheritance' and 'transmission' of vulnerability to victimisation (all crimes excepting shop theft and fraud) between sweep 1 and sweep 2. We use the term 'inheritance' to describe that vulnerability to victimisation in sweep 2 which is a continuation of vulnerability identified in sweep 1. We use the term 'transmission' to describe that vulnerability to victimisation identified in sweep 1 which is reflected in sweep 2. They look at the same phenomenon from different directions. Table A1 looks a little complex at first sight, so let us go through it.

The first cell in the far right column tells us that 16 of the 483 businesses which took part in both sweeps of the survey were found to be chronic victims in the second sweep, that is, they suffered ten or more incidents (excluding shop theft and fraud). These 16 comprised 3% of the sample. The next cell down tells us that 19 of the 483 were found to have suffered between five and nine incidents in the second sweep. Turning to the bottom row of the table, the first cell on the left tells us that 29 businesses were found to be chronic victims in the first sweep, comprising 6% of respondents. The next cell to the right tells us that 49 of the businesses reported between five and nine incidents in the first sweep, and represented 10% of the sample.

The top left cell in the table tells us that three unfortunate businesses responded that they had suffered ten or more relevant incidents in both sweeps. Reading across the table, these three represent 19% of the 16 which suffered ten or more incidents in sweep 2. However, reading down the table, they represent 10% of the 29 who suffered ten or more incidents in sweep 1. Thus, though only 3% of the whole sample suffered of ten or more incidents in sweep 2, 10% of those who had ten or more incidents in sweep 1 did so. Also, though just 6% in sweep 1 suffered ten or more incidents, they represented 19% of these in sweep 2 to do so. This suggests that those who had been chronically victimised in sweep 1 were about three times as likely to be chronic victims again in sweep 2 as those who had not been. Indeed, it is clear from the table as a whole that those victimised in sweep 1 faced higher risks at sweep 2 than those who had not been. For example, even those with medium levels of victimisation in sweep 1 (5-9 incidents) are over-represented in the high and medium victimisation categories for sweep 2.

However, what is equally clear from table A1 is that vulnerability to chronic victimisation is not inevitably transmitted: almost half of those chronically victimised in sweep 1 were victimised only rarely in sweep 2. Moreover, some who had been infrequent victims according to sweep 1 became chronic victims by sweep 2, even where crime is falling (the 'South West part' of the table – in italics –

shows where crime experience improved, the bold and shaded diagonal from top left to bottom right shows constancy in crime experience, and the top right shows deterioration; it is easy to see that improvement heavily outweighs deterioration – see table 1 for an overview of this).

Table A1: Transmission and inheritance of overall victimisation (panel sample).

	Sweep 1									
Sweep 2	High (10+)		Medium (5-9)		Low (2-4)		Rare (0-1)		Total	
		%		%		%		%		%
High	**(3)**	**10**	(1)	2	(7)	5	(5)	2	(16)	3
%	**19**		6		44		31		100	
Medium	*(3)*	*10*	**(3)**	**6**	(6)	4	(7)	3	(19)	4
%	*16*		**16**		32		37		101	
Low	*(9)*	*31*	*(20)*	*40*	**(33)**	**23**	(56)	21	(118)	24
%	*8*		*17*		**28**		47		100	
Rare	*(14)*	*48*	*(25)*	*51*	*(98)*	68	**(193)**	**74**	(330)	68
%	*4*		*8*		*30*		**58**		100	
Total	(29)	99	(49)	99	(144)	100	(261)	100	(483)	
%	6		10		30		54			100

The next five tables have an identical structure to that of table A1, but refer to specific crime categories. Tables A5 and A6 relate to criminal damage and transport losses, not focused on by SBCI and included here for comparative purposes. All tables tell the same basic story. There is inherited risk, but much fluidity in the population of the more heavily victimised.

Table A2: Transmission and inheritance of burglary risk (panel sample).

	Sweep 1									
Sweep 2	Three plus		Two		One		None		Total	
		%		%		%		%		%
Three +	**(4)**	**11**	(3	6	(2)	2	(8)	3	(17)	4
%	**24**		18		12		47		101	
Two	*(2)*	*5*	**(6)**	**11**	(6)	6	(19)	7	(33)	7
%	6		**18**		18		58		100	
One	*(8)*	*21*	*(11)*	*20*	**(22)**	**20**	(40)	14	(81)	17
%	*10*		*14*		**27**		49		100	
None	*(24)*	*63*	*(34)*	*63*	*(80)*	*73*	**(214)**	**76**	(352)	73
%	*7*		*10*		*23*		**61**		101	
Total	(38)	100	(54)	100	(110)	101	(281)	100	(483)	
%	8		11		23		58			100

Table A3: Transmission and inheritance of risk: abuse (panel sample).

	Sweep 1									
Sweep 2	Four plus		Two-three		One		None		Total	
		%		%		%		%		%
Four +	**(4)**	**14**	(2)	11	(4)	11	(8)	2	(18)	4
%	**22**		11		22		44		99	
Two-Three	*(3)*	*11*	**(2)**	**11**	(1)	3	(14)	3	(20)	4
%	*15*		**10**		5		70		100	
One	*(4)*	*14*	*(3)*	*17*	**(6)**	**17**	(41)	10	(54)	11
%	*7*		6		**11**		76		100	
None	*(17)*	*61*	*(11)*	*61*	*(24)*	69	**(339)**	**84**	(391)	81
%	*4*		*3*		6		**87**		100	
Total	(28)	100	(18)	100	(35)	100	(402)	99	(483)	
%	6		4		7		83			

Table A4: Transmission and inheritance of risk: fraud (panel sample).

	Sweep 1									
Sweep 2	Three plus		Two		One		None		Total	
		%		%		%		%		%
Three +	**(7)**	**18**	(6)	12	(5)	9	(16)	4	(34)	7
%	**21**		18		15		47		101	
Two	*(7)*	*18*	**(4)**	**8**	(5)	9	(15)	4	(31)	6
%	*23*		**13**		16		48		100	
One	*(3)*	*8*	*(3)*	6	**(3)**	**5**	(21)	6	(30)	6
%	*10*		*10*		**10**		70		100	
None	*(23)*	*58*	*(37)*	*74*	*(44)*	*77*	**(284)**	**85**	(388)	80
%	6		*10*		*11*		**73**		100	
Total	(40)	102	(50)	100	(57)	100	(336)	99	(483)	
%	8		10		12		70			

Table A5: Transmission and inheritance of risk: criminal damage (panel sample).

	Sweep 1									
Sweep 2	Three plus		Two		One		None		Total	
		%		%		%	%			%
Three +	**(3)**	**13**	(1)	3	(1)	2	(10)	3	(15)	3
%	**20**		7		7		67		101	
Two	*(0)*	*0*	**(0)**	**0**	(5)	10	(5)	1	(10)	2
%	*0*		**0**		50		50		100	
One	*(4)*	*17*	*(4)*	*14*	**(9)**	**17**	(35)	9	(52)	11
%	8		8		**17**		67		100	
None	*(17)*	*71*	*(24)*	*83*	*(37)*	*71*	**(328)**	**87**	(406)	84
%	*4*		6		9		**81**		100	
Total	(24)	101	(29)	100	(52)	100	(378)	100	(483)	
%	5		6		11		78			

Table A6: Transmission and inheritance of risk: transport losses (panel sample).

	Sweep 1									
Sweep 2	Three plus		Two		One		None		Total	
		%		%		%		%		%
Three +	**(2)**	**10**	(0)	0	(3)	4	(5)	1	(10)	2
%	**20**		0		30		50		100	
Two	*(2)*	*10*	**(2)**	**13**	(2)	3	(7)	2	(13)	3
%	*15*		**15**		15		54		99	
One	*(3)*	*15*	*(1)*	6	**(3)**	**4**	(28)	8	(35)	7
%	9		*3*		**9**		80		101	
None	*(13)*	*65*	*(13)*	*81*	*(69)*	90	**(330)**	**89**	(425)	88
%	*3*		*3*		*16*		**78**		100	
Total	(20)	100	(16)	100	(77)	101	(370)	100	(483)	
%	4		3		16		77			

It is possible to construct indices of risk transmission between sweeps 1 and sweep 2 by calculating expected transmission and comparing it with actual findings. Tables A7 and A8 do just this for overall victimisation, combining the heavily and moderately victimised to increase cell sizes. Table A7 shows 'expected' figures, were victimisation levels for all incidents in sweep 1 to have no influence at all on victimisation rates in sweep 2. Table A8 shows the ratio of actual to expected figures. The table provides a measure of transmitted risk (and safety).

Table A7: Expected distribution of (all) incidents across two sweeps

	Sweep 1		
Sweep 2	5+ incidents	2-4 incidents	0-1 incident
5+ incidents	6	10	19
2-4 incidents	19	35	64
0-1 incident	53	98	178

Table A8: Indices of risk transmission between sweeps 1 and 2 for all incidents			
	Sweep 1		
Sweep 2	5+ incidents	2-4 incidents	0-1 incident
5+ incidents	1.7	1.3	0.6
2-4 incidents	1.5	0.9	0.9
0-1 incident	0.7	1	1.1

The top left cell in Table A8 shows that 1.7 times the expected number of those experiencing five or more incidents in sweep 1 also experienced five or more incidents in sweep 2. The bottom right cell shows that 1.1 times the expected number of many businesses experiencing one or fewer incidents in sweep 1 also experienced one or fewer incidents in sweep 2. The bottom left cell shows that seven tenths the expected number of businesses which experienced five or more incidents in sweep 1 experienced 0-1 incidents in sweep 2. The top right cell shows that six tenths the expected number of businesses experiencing one or fewer incidents in sweep 1 experienced five or more in sweep 2.

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