WORKPLACE INDUSTRIAL RELATIONS SURVEY

TIME-SERIES DATASET

[Version 1.2: December 2001]

INTRODUCTORY NOTES

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Acknowledgements

The compilation and primary analysis of the WIRS Time-Series Dataset was chiefly undertaken by Neil Millward and John Forth (National Institute of Economic and Social Research) and Alex Bryson (Policy Studies Institute). The analysis of the WIRS Time-Series formed a key part of the research that was subsequently reported in a 300-page volume entitled *All Change at Work?*, published by Routledge in Spring 2000.

Thanks are gratefully expressed to the Leverhulme Trust, who provided generous support for the research that culminated in the writing of *All Change at Work?*, and to the ESRC, who provided funding for the WERS98 Data Dissemination Service (Award No. H554255001) which finalised the dataset and managed its deposit.

Grateful thanks are also expressed to Steve Woodland who, whilst employed at the Department of Trade and Industry as part of the research team for the 1998 survey, completed much of the initial preparation of the dataset. Thanks are also due to Karen Mackinnon at the Policy Studies Institute, who assisted with the preparation of data from the 1980 and 1984 surveys, and to Simon Kirby of the WERS98 Data Dissemination Service, who assisted in the final depositing.

WIRS TIME-SERIES DATASET

1. The Nature of the WIRS Time-Series Dataset

The WIRS Time-Series Dataset is formed from the interviews with the **main management respondent** in each of the four cross-section surveys (1980, 1984, 1990 and 1998). The dataset contains a wide range of data items from throughout the 1998 management questionnaire for which there are also comparable items in at least one other previous cross-section survey in the WIRS series.

None of the information obtained from interviews with other role-holders is currently incorporated in the dataset, except for those elements of the 1990 survey of financial managers in which selected questions from the main interview were asked of this respondent instead of the personnel manager.[1]

This time-series dataset makes the most of the continuity present within the survey series by providing direct comparisons of employment relations practice at four specific points in time over the past two decades. It is therefore possible to investigate the degree of change or stability in the incidence of specific practices over time, both in aggregate and within particular sectors of the economy or types of workplace. One can also assess the extent to which historical relationships – such as that between workplace size and union presence, for example - have changed over the period of observation.

Published analyses based on the initial version of the dataset can be found in:

> Millward N, Forth J and Bryson A (1999) "Changes in employment relations, 1980-1998", in M Cully, S Woodland, A O'Reilly and G Dix, *Britain at Work: As Depicted by the 1998 Workplace Employee Relations Survey*, London: Routledge.
>
> Millward N, Bryson A and Forth J (2000) *All Change at Work? British Employment Relations 1980-1998, as portrayed by the Workplace Industrial Relations Survey series*, London: Routledge.

The second of these two publications also contains an overview of the methodology employed in each of the surveys that comprise the WIRS series.

This deposited version of the dataset (Version 1.2) is largely the same as the initial version used in the publications cited above (Version 1.1, which has not been deposited). However, a small number of improvements have been made to enhance the consistency of variable definitions and to expand the range of variables incorporated within the dataset. The deposited dataset contains 222 consistently defined variables, comprising 180 data items that are present in the 1998 cross-section survey and at least one previous cross-section survey in the WIRS series, plus 42 derived variables. Nonetheless, there are undoubtedly some consistent data items

[1] The purpose of this was to reduce the burden on personnel managers. In workplaces where the respondent was identified as a personnel specialist and a financial manager could also be identified, certain questions which, elsewhere, were asked of the personnel manager were instead directed to the financial manager. This occurred in 454 workplaces in total.

which have not been included in either version and so the dataset is not guaranteed to be complete. A full list of variables contained within the dataset is provided in Appendix B of this document.

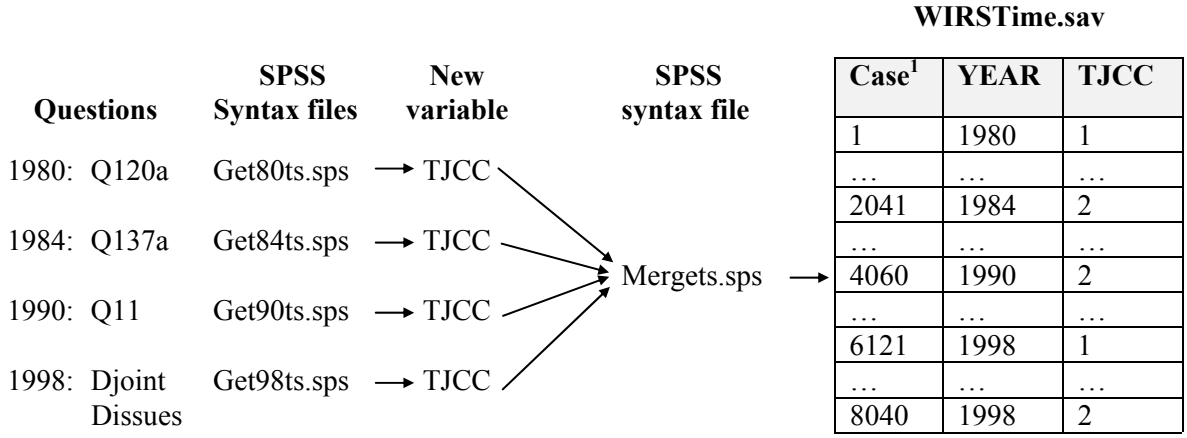
2. Compilation of the Time Series Dataset

Taking a topic covered in the 1998 survey, such as the presence of a multi-issue joint consultative committee (Questions: DJOINT and DISSUES), similar questions were first identified in the each of the previous three surveys in the series. If the questions were considered sufficiently similar to permit the compilation of a consistent measure, a data item would be derived from each of the relevant survey data files. Data items were given descriptive variable names, all beginning with the letter T, such as TJCC.

Having derived these consistent data items, workplace records from each of the four surveys were then added together to form a single time-series dataset that spanned the whole of the WIRS series, as indicated in Figure 1. An additional variable named YEAR was also added to the dataset to identify the survey from which each individual observation originates.

The time-series dataset contains 8,049 records, comprising all of the workplaces surveyed in the 1980, 1984 and 1990 cross-section surveys and all 1,929 workplaces with 25 or more employees surveyed in 1998. Smaller workplaces interviewed as part of the 1998 survey were excluded in order to maintain a consistent basis for comparison.

Figure 1 Illustration of the process of compiling time-series data items



1 The case numbers given here are for illustrative purposes only.

Most variables, such as TJCC, contain observations from each of the four surveys in the WIRS series. However, a number contain observations from only three or two surveys in the series because changes in the content of the questionnaire, or in the detail of question wording and format, have prevented the compilation of a full series. TINVPLAN is one example, there being no question on the distribution of information about investment plans in the 1980 survey.

The documentation that accompanies the time-series dataset, which includes information on the source variables used in compiling each data item, is described in the next section.

3. Supporting Documentation

There are three elements to the supporting documentation that accompanies the time-series dataset:

1. A table mapping the origins of each time-series variable
2. The original survey documentation from each of the four surveys in the series
3. The SPSS syntax files used to create the dataset.

The first item is appended to this introductory note. The remaining two items are contained within the User Guide supplied with the time-series data file by the UK Data Archive.

(i) Time-series variable map

This consists of a large table listing all of the time-series variables that have been compiled, along with their source questions in each survey in the series and any notes concerning comparability over time. It can be found in Appendix B to this note.

(ii) Original survey documentation

The original questionnaires, code books and technical reports from each of the four surveys are all supplied with the time-series dataset.

(iii) SPSS syntax files

The five SPSS syntax files used in the compilation of the time-series dataset are supplied along with the data file for reference purposes. The syntax files are as follows:

Get80ts.sps	Derives time-series variables from the 1980 survey data
Get84ts.sps	Derives time-series variables from the 1984 survey data
Get90ts.sps	Derives time-series variables from the 1990 survey data
Get98ts.sps	Derives time-series variables from the 1998 survey data
Mergets.sps	Compiles time-series variables from all four surveys into a single data file

Users are advised to consult these syntax files in order to establish the precise means by which a particular time-series variable has been derived from the source data.

Get90ts.sps and Get98ts.sps both draw upon the survey data files deposited with, and available, from the UK Data Archive. Consequently, users should experience no difficulties in interpreting these syntax files. However, in compiling data for the 1980 and 1984 entries in our time-series data set, we have used the original ASCII data files

held by the WIRS Research Team, primarily because we were more familiar with the layout of these data files than the versions deposited at the UK Data Archive. The original ASCII data files should contain the same data as the deposited data files; however, there are some minor differences in the layout of the data which will affect users' interpretation of the syntax. These are outlined in Appendix A at the end of this document.

4. Analysis of the Time-Series Data

(i) Sampling weights

Each of the surveys in the WIRS series is based upon a stratified random sample of workplaces in existence at the time of the survey. In each case, the sample design entails that workplaces have differing probabilities of selection. To derive unbiased estimates from the sample of workplaces, the data must therefore be weighted to restore the profile of the sample to that of the population.[2] The time-series dataset contains a single workplace weight variable, named WEIGHT, which incorporates the workplace weights from each of the four surveys.

The dataset also contains a second weight variable, named EEWEIGHT, which may be used to obtain unbiased employee-based estimates (e.g. the proportion of employees who work in establishments with joint consultative committees).

(ii) Tabulating the data

Once the data has been weighted, tabulating any of the time-series data items, such as TJCC, by YEAR will provide a table showing how the incidence of this particular arrangement varied among the population of workplaces over the course of the survey series. Users with access to the Tables module within SPSS will be able to employ the following syntax:

```
WEIGHT BY weight .

TABLES
  /FORMAT BLANK MISSING('.')
  /FTOTAL = Base1 'Base' Total1 'Total'
  /AUTOLABEL=ON
  /TABLES (tjcc + Base1) BY year
  /STATISTICS cpct(tjcc(F3) '': year)
     count(Base1 'Weighted') u count(Base1 'Unweighted')
  /CAPTION 'Base: All establishments' .
```

This syntax will produce the following table, which corresponds to the final row in Table 10.13 of *Britain at Work*:

[2] Further details of the sampling design of each survey are provided in the Technical Reports that form part of the documentation for the time-series dataset. Interested readers are also referred to Chapter 4 of Forth J and Kirby S (2000) *Guide to the Analysis of the Workplace Employee Relations Survey 1998* and to Purdon S and Pickering K (2001) *The use of sampling weights in the analysis of the 1998 Workplace Employee Relations Survey*. Both are published by the WERS98 Data Dissemination Service and are available on-line at: http://www.niesr.ac.uk/niesr/wers98/.

(TJCC + BASE1) BY YEAR

		1980	1984	1990	1998
Any joint consultative committees?	1 Yes	34	34	29	29
	2 No	66	66	71	71
Base	Weighted	1987	2000	1999	1998
	Unweighted	2031	2017	2057	1926

Base: All establishments

For further guidance on the use of the SPSS Tables module, the reader is referred to Chapter 5 of Forth J and Kirby S (2000) *Guide to the Analysis of the Workplace Employee Relations Survey 1998*, published by the WERS98 Data Dissemination Service and available on-line at: http://www.niesr.ac.uk/niesr/wers98/.

Appendix A: Interpreting Get80ts.sps and Get84ts.sps

In compiling data for the 1980 and 1984 entries in our time-series data set, we have used the original ASCII data files held by the WIRS Research Team. The layout of these original ASCII data files is slightly different to the versions deposited with, and available from, the UK Data Archive. Specifically, the original ASCII data files include some multi-punched data items. This means that some data items – usually ones arising from questions that permitted multiple responses - are stored on top of one another in a single stack of codes, rather than alongside each other in adjacent columns. An example is the sources of advice listed in response to Question 20b in 1980, where up to 9 response codes are all stacked in column 29 on card 2 of the data file.

This form of data storage is utilised by the Quantum analysis package, which was used in the primary analysis of both the 1980 and 1984 surveys. However, ASCII data in this form cannot be read by SPSS – the package most familiar to WIRS users and our preferred choice for compiling the time-series data. To read multi-punched data into SPSS, one must first 'explode' the stacked data items: removing the codes, one-by-one, and depositing each of them into a unique, new location. To continue the example cited above, the nine response codes to Question 20b in 1980 (codes 1 to 9) were extracted from column 29 on card 2 and moved into columns 50-58 on card 60. Code 1s were deposited in column 50, code 2s in column 51 and so on.

The consequence of this procedure is that, in the FILE LIST command, multi-punched data is not read in from the card and column location given in the questionnaire, but from its new 'exploded' location. A record of the new card and column locations of 'exploded' data items is given in the following tables.

1. 'Exploded' multi-punched data items, 1980:

Question number	Original location Card	Original location Column	New location Card	New location Columns[1]
23a	1	63	60	30-38
20b	2	29	60	10-18
21b	2	32	60	20-27
39a	4	70	60	50-58
44a	5	20	60	60-68
70a	7	07	60	70-78
75a	7	23	61	10-18
108a	8	49	60	40-49

Notes:
1. Codes are exploded into columns in ascending order, from 1 to 9, followed by 0.

2. 'Exploded' multi-punched data items, 1984:

Question number	Original location Card	Original location Column	New location Card	New location Columns[1]
16a	7	11	60	30-37
17a	7	16	60	10-18

22b	7	41	60	20-23
42	11	09	62	10-14
43b (i)	11	11	63	10-19
43b (ii)	11	12	63	20-28
43b (iii)	11	13	63	30-32
48a	11	21	62	55-59
48d (i)	11	24	63	35-43
48d (ii)	11	25	63	45-53
48d (iii)	11	26	63	55-56
49a	11	27	62	60-64
49d (i)	11	30	63	60-68
49d (ii)	11	31	63	70-78
59	12	19	62	30-39
91	14	09	62	15-19
92b (i)	14	11	64	10-18
92b (ii)	14	12	64	20-28
92b (iii)	14	13	64	30-33
97a	14	21	62	65-69
97d (i)	14	24	64	35-43
97d (ii)	14	25	64	45-53
97d (iii)	14	26	64	55-56
98a	14	27	62	70-74
98d (i)	14	30	64	58-66
98d (ii)	14	31	64	67-75
98d (iii)	14	32	64	76-77
105	15	07	62	40-48
132a (i)	17	07	60	60-64
132c (i)	17	09	60	65-69
132a (ii)	17	12	60	70-74
132c (ii)	17	14	60	75-79
132a (iii)	17	17	61	10-14
132c (iii)	17	19	61	15-19
132a (iv)	17	22	61	20-24
132c (iv)	17	24	61	25-29
132a (v)	17	27	61	30-34
132c (v)	17	29	61	35-39
132a (vi)	17	32	61	40-44
132c (vi)	17	34	61	45-49
132a (vii)	17	37	61	50-54
132c (vii)	17	39	61	55-59

Continued…

Question number	Original location Card	Column	New location Card	Columns[1]
132a (viii)	17	42	61	60-64
132c (viii)	17	44	61	65-69
142	18	73	60	40-48
144b	19	21	60	50-54
157a	20	39	62	20-28
164a	21	07	62	50-54

Notes:
1. Codes are exploded into columns in ascending order, from 1 to 9, followed by 0.

Appendix B: Time-Series Variable Map

The following table lists each of the time-series variables that appear within the deposited dataset, along with their source questions in each survey in the series and any notes concerning comparability over time.

Users are advised to consult the five SPSS syntax files (provided as part of the User Guide) in order to establish the precise means by which a particular time-series variable has been derived from the source data.

Key to variable types:

C= Continuous; Cat = Categorical; D = Dichotomous

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Total employees at establishment	**TALLEMPS**	ZALLEMPS	TOTEMP	TOT11	TOT7 & TOT11	C	
Total employees at establishment (banded)	**TALLEMP3** **TALLEMP4** **TALLEMP5** **TALLEMP6**	Derived from TALLEMPS				Cat Cat Cat Cat	3 bands: 25-99; 100-499; 500+ 4 bands: 25-99; 100-499; 500-999; 1000+ 5 bands: 25-49; 50-99; 100-199; 200-499; 500+ 6 bands: 25-49; 50-99; 100-199; 200-499; 500-999; 1000+
Total employees at establishment 12 months ago	**TEMP1AGO**	ZEMP1AGO	TOTEMP1Y	TOT36	TOT19	C	
Total employees at establishment 5 years ago	**TEMP5AGO**	ZEMP5AGO	X	X	TOT20	C	
Total female employees at the establishment	**TALLFEM**	ZFEMFULL, ZFEMPRT	MANFUSK, MANFSSK, MANFSK, CLERCF, SUPVF, JRTECHF, SRTECHF, MANAGEF	TOT13, TOT16, TOT19, TOT22, TOT25, TOT28, TOT31 & TOT34	TOT3 & TOT6	C	
Female employees as a percentage of workforce	**TFEMPC**	Derived from TALLFEM and TALLEMPS				C	Range: 0-100%

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Female employees as a percentage of workforce (banded)	**TFEMPC12** **TFEMPC3** **TFEMPC3B** **TFEMPC5B**	Derived from TFEMPC				Cat Cat Cat Cat	10% bands of TFEMPC, plus 0% and 100% 3 bands: 0-30%; 31-70%; 71%+ 3 bands: 0-24%; 25-74%; 75%+ 5 bands: 0-9; 10-24; 25-74; 75-89; 90%+
Total males in full time employment	**TFTMALE**	ZMALFULL	MANFTM NMANFTM	TOT4 & TOT9	TOT2	C	
Total female in full time employment	**TFTFEM**	ZFEMFULL	MANFTF NMANFTF	TOT5 & TOT10	TOT3	C	
Total full-time employees	**TALLFT**	ZMALFULL ZFEMFULL	MANFT NMANFT	TOT4, TOT5, TOT9 & TOT 10	TOT1	C	
Total part-time employees	**TALLPT**	ZMALPRT ZFEMPRT	MANPT NMANPT	TOT2 & TOT7	TOT4	C	
Part-time employees as a percentage of the total workforce	**TPTPC**	Derived from TALLPT and TALLEMPS				C	Range: 0-100%
Part-time employees as a percentage of the total workforce (banded)	**TPTPC12** **TPTPC3** **TPTPC3B** **TPTPC4B**	Derived from TPTPC				Cat Cat Cat Cat	10% bands of TPTPC, plus 0% and 100% 3 bands: 0-5%; 6-40%; 41%+ 3 bands: 0; 1-24%; 25%+ 5 bands: 0; 10-24; 25-49; 50%+
Total non-manual employees	**TALLNM**	ZMNG_TOT ZPRO_TOT ZTEC_TOT ZCLE_TOT ZSAL_TOT	TOTNMAN	TOT8	TOT11	C	1998: Comprises SOC1-SOC4 & SOC7.

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Non-manual employees as a percentage of the total workforce	**TNMPC**	Derived from TALLNM and TALLEMPS				C	See comment for TALLNM.
Non-manual employees as a percentage of the total workforce (banded)	**TNMPC12** **TNMPC3**	Derived from TNMPC				Cat Cat	10% bands of TNMPC, plus 0% and 100%. 3 bands: 0-24%; 25-74%; 75%+.
Employees from ethnic minorities as a percentage of the total workforce (banded)	**TEMPC5**	ZETHNIC ZETHNICP	N27, N28	Q157	Q117	Cat	Changes in question wording in each year. 1998: question included on EPQ 1980: bands are 5-9; 10-19 rather than 5-10; 11-20
Percentage of managers that are female	**TMGRFPC**	ZMNG_TOT ZMNG_FFT ZMNG_FPT	MANAGEF MANAGET	TOT34 TOT35	X	C	1998: EPQ uses SOC90 - not thought to impair comparability on this variable
Measure of vertical segregation (Women as % of managers / Women as % of all employees)	**TVERSEG**	Derived from TMGRFPC and TFEMPC				C	See comments for TMGRFPC and TFEMPC.
Measures of vertical segregation (grouped)	**TVERSEG5** **TVERSEG3**	Derived from TVERSEG				Cat Cat	5 categories: No female mgrs; Women under-represented; Equality; Women over-represented; No male managers 3 categories: Women under-represented; Equality; Women over-represented
Whether any union members among employees at establishment	**TANYMEM**	EANYEMP	C2	25A, 74A	22, 51	D	
Number of union members at the workplace (Version A)	**TNUMMEMA**	EANYEMP, ZTU_MEM, ZTU_PC	TOTEMPUN	26C, 26E, 75C, 75E	23C, 54A, 54B	C	1980: Full-time employees only (won't always match TANYMEM)

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Number of union members at the workplace (Version B)	**TNUMMEMB**	Derived from TNUMMEMA				C	Recodes cases on TNUMMEMA where DK if any members to 0. See notes for TNUMMEMA.
Union density at the workplace (Version A)	**TUDENSA**	Derived from TNUMMEMA and TALLEMPS (in annual syntax files, rather than in Mergets.sps)				C	See notes for TNUMMEMA.
Union density at the workplace (Version A – banded)	**TUDENS6A**	Derived from TUDENSA.				Cat	0% plus 6 bands: 1-24%; 25-49%; 50-74%; 75-89%; 90-99%; 100% See notes for TNUMMEMA.
Union density at the workplace (Version B)	**TUDENSB**	Derived from TNUMMEMB and TALLEMPS				C	See notes for TNUMMEMB.
Union density at the workplace (Version B – banded)	**TUDENS6B**	Derived from TUDENSB.				Cat	0% plus 6 bands: 1-24%; 25-49%; 50-74%; 75-89%; 90-99%; 100% See notes for TNUMMEMB.
Main industrial activity of the establishment (5-digit SIC92)	**TSIC92**	ASIC_FIN	X	X	X	Cat	
Main industrial activity of the establishment (4-digit SIC80)	**TSIC80**	X	A1	1A	1A	Cat	
Main industrial activity of the establishment (1-digit SIC80: Division level)	**TSIC80B**	ASIC_FIN	A1	1A	1A	Cat	1998: recoded from SIC92

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Broad industrial activity (manufacturing; services)	**TSICSUM**	Derived from TSIC80B				D	Manufacturing & extraction taken as SIC80 classes 2 to 4 inclusive. See note for TSIC80B.
Whether establishment's main activity is manufacturing (i.e. not extraction or services)	**TMANUF**	Derived from TSIC80B				D	Manufacturing taken as SIC80 codes 2210-2247 & 2410-4959. See note for TSIC80B.
Single establishment or part of multi-establishment organisation	**TSINGLE**	ASINGLE	A4	3A	3	D	1998: 'Sole UK' coded as 'Multi' .
Single establishment, branch office of multi or head office of multi.	**TSINGLE2**	Derived from TSINGLE and THO				Cat	See notes for TSINGLE and THO.
Number of establishments in organisation in the UK	**TESTNUM**	AESTNUM	P12	6A	4C	Cat	In 1980 and 1998, questions asks about organisation; in 1984 and 1990, questions ask about organisation or ultimate controlling company. 1984: 500-996, 997+ rather than 500-999, 1000+ 1990: See comment on TORGSIZE. Multis for whom P12=1 coded to 1 for consistency with 1998.
Organisation's UK employment size (7 bands)	**TORGSIZE**	AUKTOT	P13	6B	4D	Cat	Collapses data into bands used in 1980: 25-99; 100-499; 500-999; 1000-1999; 2000-4999; 5000-9999; 10000+. 1980: bands include first value of next (i.e. 1-100 not 1-99 as in other years). 1990: Trading sector only; Financial Manager responses and some others missing. Some imputed using imputations derived by Alex Bryson & Neil Millward in earlier work.

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Organisation's UK employment size (banded)	**TORGSIZ3** **TORGSIZ4** **TORGSZ4B**	Derived from TORGSIZE				Cat Cat Cat	3 bands: 25-499; 500-9999; 10000+0000 4 bands: 25-499; 500-1999; 2000-9999; 10000+ 4 bands: 25-99; 100-999; 1000-9999; 10000+ See comments for TORGSIZE.
Formal status of establishment	**TSTATUS**	ASTATUS	A3	2	2A	D	Private sector; public sector
Formal status of establishment	**TSTATUS2**	Derived from TSTATUS and TTRADING				Cat	Private sector; public sector trading; other public sector. See comments for TTRADING.
Broad industry and status	**TSECTOR3**	Derived from TSTATUS and TSICSUM				Cat	Private manufacturing; Private services; Public sector
Detailed industry and status (15 categories)	**TSECT15**	ASTATUS, ASIC_FIN	A3, A1	1A, 2	1A, 2A	Cat	1980-90: Derived from SIC80 coding 1998: Derived from SIC92 coding
Whether part of the trading sector [i.e. private sector plus trading public corporations]	**TTRADING**	ASTATUS, ASIC_FIN	A3	2	2A	D	1998: Identifies trading public corporations through status indicator and detailed SIC(92) codes.
Whether UK or foreign owned organisation (3 categories) (where TSTATUS=1)	**TUKFO**	ACONTROL	P9 F-A11	4D	5	Cat	1980: No 50/50 UK/FO category 1980-90: not asked for singles, but all assumed to be UK owned 1990: Uses Financial Manager's responses where available 1998: Collapses codes (1,2=1) (3=2) (4,5=3) and codes all singles to UK owned for consistency with previous years

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Whether UK or foreign owned organisation (2 categories) (where TSTATUS=1)	**TUKFO2**	Derived from TUKFO				D	Collapses TUKFO into 2 categories (UK and 50/50; Foreign-owned)
Whether establishment is a head office, administrative office or neither (where TSINGLE=2)	**THO**	ACONHEAD AHEADOFF KACTIVI	A5	3B	4B	D	1980: Administrative offices not distinguished from other offices 1980, 1998: questions do not mention 'goods and services'
Whether part of a UK multi-national (i.e. organisation owns units outside UK) (where TSTATUS=1, TSINGLE=2 and TUKFO=1)	**TMULTNAT**	ASUBSID	P10 FA-12	X	X	D	1990: Uses Financial Manager's responses where available
Age of workplace (including previous addresses)	**TAGE**	AHOWLONG APREV5YR	X	1C	1B	Cat	1980, 1984: years engaged in main activity 1998: years at current and previous address
Number of years operating at current address (0-4; 5-9; 10-20; 21+)	**TTIMHERE**	AHOWLONG	A21	X	X	Cat	
Number of years operating at current address (0; 1; 2; 3; 4; 5-9; 10-20; 21+)	**TTIMHER7**	**AHOWLONG**	A21	X	X	Cat	
Whether always been at current address (where TAGE<=9)	**TADDRESS**	**ADDRESS2**	A22	X	X	D	Restricted to TAGE<=9 to promote comparability.
Status of site before arrival (where TADDRESS=2)	**TPREV**	**APREV**	A25	X	X	Cat	Restricted to TADDRESS=2 to promote comparability.

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Respondent's gender	**TSEX**	**BSEX**	X	X	Q11D	D	
Whether personnel specialist (as designated by job title)	**TSPECIAL**	**BTITLE**	A6A, A6B	16A	11A	D	Definition of "specialist" : personnel, human/manpower resources, or industrial, employee or staff relations in job title.
Respondent's job title	**TTITLE**	**BTITLE**	A6A A6B	16A	11A	Cat	1998: Verbatim responses to BTITLE manually recoded to produce a code frame consistent across years. Does not match BTITLE2 - the code frame used for the cross-section.
Manager's personnel and industrial relations responsibilities: Pay and conditions Recruitment and selection Training Systems of payment Staffing/manpower planning	**TYOURJ01** **TYOURJ02** **TYOURJ03** **TYOURJ04** **TYOURJ05**	**BYOURJ01-10** **BYOURJ01-10** **BYOURJ01-10** **BYOURJ01-10** **BYOURJ01-10**	A11_D1 A11_D3 A11_D4 A11_D5 A11_D8	17A_D1 17A_D3 17A_D4 17A_D5 17A_D8	13A_D1 13A_D3 13A_D4 13A_D5 X	D D D D D	1980: tasks that form part of respondent's job 1984-98: tasks that form part of respondent's job, or job of someone responsible to them.
Whether responsible for personnel or industrial relations matters at establishment	**TMANAGE**	**BUMANAGE**	A10	X	X	D	1990: Ask if there is someone more senior. 1998: Asks if respondent has prime responsibility.
Time spent on employee relations issues	**TERTIME**	**BPROPORT**	A13A	17B	X	C	

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Time spent on employee relations issues (Less than 25%; 25% or more)	**TERTIMEA** **TERTIMEB**	**BPROPORT** **X**	A13B X	17B X	X 13B	Cat D	1980: asks whether respondent spends "a major part of their time" on employee relations issues. Not directly comparable, so 1980 data coded to separate variable, TERTIMEB (1=major part of time).
Experience in job	**TLENGTH** **TLENGTHB**	**BLENGTH** **BLENGTH**	A9 A9	16C 16C	X 11B	Cat Cat	1980: continuous to 7 years, with 8 year ceiling. TLENGTH is a 6-category variable. TLENGTHB is a 3-way categorical variable to allow comparability with W80.
Years experience in personnel matters (where TERTIMEA=2)	**TSERVICE**	**BSERVICE**	A17	17D	X	Cat.	TERTIMEA filter imposed to promote consistency between years.
Years experience in personnel matters (Two years or more; Less than two years) (1980: where TERTIMEB=1; 1984-1998: where TERTIMEA=2)	**TSERVICB**	**BSERVICE**	A17	17D	16C	D	TSERVICB is a 2-way categorical variable to allow comparability with 1980. TERTIMEA/TERTIMEB filter imposed to promote consistency between years.
Whether any formal qualifications in personnel management (1980: where TERTIMEB=1; 1984-1998: where TERTIMEA=2)	**THAVQUAL**	**BHAVQUAL**	A18	17E	16A	D	1980, 1998: only asked if ER is a major part of job. TERTIMEA/TERTIMEB filter imposed to promote consistency between years.
Whether any personnel or employee relations staff	**TASSIST**	**BASSIST**	A20	19	15A	D	1998 includes 'secretarial and clerical staff', whereas 1980-90 do not. 1980: only asked if respondent spends major part of time on ER/personnel. Filter <u>not</u> imposed on other years' data in TASSIST.
Respondent's contact with ER specialist at higher level in the organisation (where TSINGLE=2 and THO=2/3)	**TSEPAR**	**BSEPAR**	B2	21B	17	D	1984: only asked of personnel specialists. This filter <u>not</u> imposed on other years' data in TSEPAR. 1980: makes no reference to "separate establishment" .

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
							1980 also refers to "reporting" to a higher manager, whereas 1984 and 1990 refer to "contact", while 1998 asks if such a person exists.
Employee relations representation on board of directors (where TSTATUS=1, TSINGLE=2 and TUKFO=1/2)	**TBOARD**	**BBOARD**	B10A, B10B	22B	18B	D	1998 only refers to "Board of Directors", rather than main governing body.
Whether member of Employers' Association	**TEASS**	**BMEMBER**	B23	23A	21A	D	1998: any membership. 1980-90: membership for negotiation purposes. 1990: only asked in trading sector. This filter not imposed on other years' data in TEASS.
Whether management sought employee relations advice from:							
ACAS/Other gov. agency	**TADVICE1**	**BADVICE1-8**	B18_D1	X	Q20B_D1, Q20B_D15, Q20B_D17	D	1980 refers to outside the establishment. 1990 refers to outside the organisation. 1998 code frame makes clear it's outside the organisation.
Management consultants	**TADVICE2**	**BADVICE1-8**	B18_D2	X	Q20B_D2	D	
External lawyer	**TADVICE3**	**BADVICE1-8**	B18_D5	X	Q20B_D6,7	D	
External accountant	**TADVICE4**	**BADVICE1-8**	B18_D6	X	Q20B_D8	D	
Management holds regular meetings between senior managers and all sections of the workforce	**TCONSALL**	**DCONSUL1-6**	L19	142	X	D	1998: Not restricted to senior managers. Phrase "..as a matter of policy" also dropped.
Problem-solving groups	**TCIRCLES**	**DCIRCLES**	L19	X	X	D	1990: Restricted to groups that meet at least once a month.
Briefing groups	**TBRIEF**	**DBRIEF** **DBRIEFU** **DBRIEFN**	L19	142	X	D	1998: does not specify who should deliver the briefing (1990 specifies junior managers or supervisors).

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Management makes systematic use of management chain for communication	**TCHAIN**	**DCONSUL1-6**	L19	142	X	D	1998: Phrase "..as a matter of policy" dropped.
Management makes use of suggestion schemes	**TSUGGEST**	**DCONSUL1-6** **DOTHWAY**	L19	142	X	D	1998: Phrase "..as a matter of policy" dropped.
Management makes use of newsletters	**TNEWS**	**DCONSUL1-6**	L19	142	X	D	
Management distributes information on investment plans to employees or their representatives	**TINVPLAN**	**DINVPLAN**	L22A	143A	X	D	1998: does management 'regularly' give… 1984, 1990: restricted to distribution of information 'before the implementation of any changes'
Management distributes information on the financial position of the establishment to employees or their representatives	**TFINANCE**	**DFINANCE**	L22B	143A	X	D	1998: does management 'regularly' give… 1984, 1990: restricted to distribution of information 'before the implementation of any changes'
Management distributes information on the financial position of the organisation to employees or their representatives (where TSINGLE=2)	**TORGFIN**	**DWHOLEFI**	L22C	143A	X	D	1998: does management 'regularly' give… 1984, 1990: restricted to distribution of information 'before the implementation of any changes'
Management distributes information on staffing or manpower plans to employees or their representatives	**TSTAFFIN**	**DSTAFFIN**	L20C	143A	X	D	1998: does management 'regularly' give… 1984, 1990: restricted to distribution of information 'before the implementation of any changes'
Scope of information provision (i.e. number of areas covered from: investment, finance and staffing).	**TINFO**	**DINVPLAN** **DFINANCE** **DWHOLEFI** **DSTAFFIN**	L22A L22B L22C L20C	143A	X	Cat	See comments relating to TINVPLAN, TFINANCE, TORGFIN and TSTAFFIN.

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Whether any Joint Consultative Committees (JCCs) at the establishment	**TJCC**	**DJOINT DISSUES**	L1	137A	120A	D	
Frequency of JCC meetings (where TJCC=1)	**TJCCFREQ**	**DMEET**	L8	138F	121A	Cat	1998: committee covering widest range of issues 1990: most important committee
Functioning JCC (meets at least every quarter)	**TJCCF**	**Derived from TJCC and TJCCFREQ**				D	See notes for TJCC and TJCCFREQ
Whether JCC worker representative chosen by trade union (where TANYMEM=1 and TJCC=1)	**TJCCTU**	**DAPPOIN1 DAPPOIN5**	L7A	138E	121D	D	See notes for TJCC.
Whether functioning JCC worker representative chosen by trade union (where TANYMEM=1 and TJCCF=1)	**TJCCFTU**	**Derived from TJCCF and TJCCTU**					See notes for TJCCF and TJCCTU
Any JCC at higher level in organisation? (where TSINGLE=2 and THO>1)	**TJCCHI**	**DHIGHLEV**	L13	139B	X	D	
Number of JCCs (where TJCC=1)	**TJCCNUM**	**DHOWMANY**	L3	138A	120A	C	1998: if more than 3, don't know whether all are multi-topic committees.
Number of JCCs (banded: 1, 2 3, 4 or more) (where TJCC=1)	**TJCCNU4**	**Derived from TJCCNUM**				Cat	See notes for TJCCNUM

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Influence of JCC (where TJCC=1)	**TJCCINF**	**DINFLUEN**	L11	X	X	Cat	See notes for TJCC.
Any JCC or higher level JCC	**TANYJCC1**	**Derived from TJCC and TJCCHI**				D	See notes for TJCC and TJCCHI
Any functioning JCC or higher level JCC	**TANYJCC2**	**Derived from TJCCF and TJCCHI**				D	See notes for TJCCF and TJCCHI
Total number of unions present (where TANYMEM=1)	**TUNINUM**	**EUNIONUM**	C9D	**X**	**X**	C	1980, 1984: possible double-counting between unions mentioned for manuals and those mentioned for non-manuals precludes derivation of a single sum
Number of unions present (banded: 1,2,3,4,5,6+) (where TANYMEM=1)	**TUNINUM6**	**Derived from TUNINUM**				Cat	See notes on TUNINUM
Total number of recognised unions (where TANYMEM=1)	**TTOTREC**	**ETOTREC, EUNIONUM**	TOTRECUN	**X**	**X**	C	1980, 1984: possible double-counting between unions mentioned for manuals and those mentioned for non-manuals precludes derivation of a single sum
Number of recognised unions (1,2,3+) (where TRECOG=1)	**TTOTREC3**	**Derived from TRECOG and TTOTREC**				Cat	See notes for TRECOG and TTOTREC
Whether any union is recognised for collective bargaining	**TRECOG**	**ETOTREC, EUNIONUM**	TOTRECUN	27A, 76A	24A, 53A	Cat	Cases where DK/NA if members present coded to 'No members'. Cases where members present but DK/NA if recognition coded to "No recognition but members".

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Whether any union is recognised for collective bargaining	**TRECOG2**	**Derived from TRECOG**				D	Simple dichotomy: recognition; no recognition.
Whether full or partial recognition	**TRECFP2**	**Derived from TRECOG and TJCCTU**				Cat	
Union membership arrangements (where TRECOG=1)	**TCLSHOP**	**EKEEPJOB** **EOUGHTO**	E2 G2	52A 101A	31A 62A	Cat	W98: Two distinct questions W80-80: joining manual and non-manual data W80: No code 2 possible "Strong recommendation": coded to 3 "Neither". *Wording:* W80: arrangements for "…any workers" W84,90: for "…any groups of workers" W98: for "…any employees"
Pre-entry closed shop (where TCLSHOP=1)	**TPREENT**	**EHAVETO**	E6 G6	54A 103A	31B, 32A 62B, 63A	D	
Any check-off system present (where TANYMEM=1)	**TCHECKOF**	**EDEDUCT**	C44	39	37B 68B	D	1980: Only asked where recognised unions. This filter <u>not</u> imposed on other years' data in TCHECKOF.
Any union reps at workplace (where TRECOG=1)	**TUREP**	**ESTEWARD**	C34M C34N C34B	35B 84B	27B 58B	D	1980-90: Specific instruction to include senior stewards (although often ignored in 1990) 1990, 1998: restricted to reps of recognised unions
Number of union reps at workplace (where TUREP=1)	**TUREPNUM**	**ESTEWNUM**	C34M C34N C34B C38	X	X	C	See comments for TUREP.

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Whether any full-time union reps (where TUREP=1)	**TFTUREP**	**ESTEWTIM**	C40M C40N C40B	37A 86A	29B 60B	D	1980-90: full-time stewards acknowledged by management as senior stewards 1998: any full-time union reps (i.e. for comparability, must assume all full-time reps would be acknowledged as senior)
Whether reps from another establishment in the organisation cover members at this establishment (where TSINGLE=2 and TUREP=2)	**TEXTREP**	**ESTEWEXT**	C36M C36B C36N	35D 84D	X	D	1998: only asks about external reps of largest recognised union 1990: external reps of recognised unions 1984: external reps of any unions
Summary of union rep presence (Full-time; Part-time; Recognition but no reps; No recognition)	**TREPSUM**	**Derived from TRECOG, TUREP and TFTUREP**				Cat	Where TUREP missing, coded to 3 Where TFTUREP missing, coded to 2
Summary of union rep presence (Local rep; External rep only; Recognition but no reps; No recognition)	**TREPSUM2**	**Derived from TRECOG, TUREP and TEXTREP**				Cat	1980: Cannot identify cases with external reps – left in category 3 (no reps)
Any non-union reps, excluding health and safety reps? (where TANYMEM=2)	**TOTHREP2**	**EOTHREPS ECHOSEN**	C41	X	X	D	
Any union/non-union voice mechanisms?	**TVOICE1**	**Derived from TRECOG, TJCCF, TJCCFTU, TCONSALL, TANYMEM and TBRIEF**				Cat	See notes for TRECOG, TJCCF, TJCCFTU, TANYMEM, TCONSALL and TBRIEF
Any union/non-union voice mechanisms?	**TVOICE2**	**Derived from TRECOG, TJCCF, TJCCFTU, TCONSALL, TBRIEF, TCIRCLES and TOTHREP2**				Cat	See notes for TRECOG, TJCCF, TJCCFTU, TCONSALL, TBRIEF, TCIRCLES and TOTHREP2
Any union/non-union voice mechanisms?	**TVOICE2A**	**Derived from TRECOG, TJCCF, TJCCFTU, TCONSALL, TBRIEF and TOTHREP2**				Cat	See notes for TRECOG, TJCCF, TJCCFTU, TCONSALL, TBRIEF and TOTHREP2

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Any representative/direct voice mechanisms?	**TVOICE3**	**Derived from TRECOG, TJCCF, TCONSALL and TBRIEF**				Cat	See notes for TRECOG, TJCCF, TCONSALL and TBRIEF
Any representative/direct voice mechanisms?	**TVOICE4**	**Derived from TRECOG, TJCCF, TCONSALL, TBRIEF, TCIRCLES and TOTHREP2**				Cat	See notes for TRECOG, TJCCF, TCONSALL, TBRIEF, TCIRCLES and TOTHREP2
Any representative/direct voice mechanisms?	**TVOICE4A**	**Derived from TRECOG, TJCCF, TCONSALL, TBRIEF, and TOTHREP2**				Cat	As per TVOICE3, plus TOTHREP2
Any voice mechanisms?	**TVOICE5**	**Derived from TVOICE2 and TVOICE4**				Cat	See notes for TVOICE2 and TVOICE4
Any voice mechanisms?	**TVOICE5A**	**Derived from TVOICE2A and TVOICE4A**				Cat	See notes for TVOICE2A and TVOICE4A
Whether formal procedures for dealing with discipline and dismissals other than redundancies	**TPROCDIS**	**HOTHPRO**	J1_D2	120B	83B	D	1998: only asks about non-managerial employees. However source-books suggest that, in earlier years, few workplaces differentiated between grades.
Number of employees dismissed in last 12 months	**TDISNUM**	**ZDISMISS**	J36, J37	X	X	C	1998: permanent employees only.
Whether any employees dismissed in last 12 months?	**TDISMISS**	**Derived from TDISNUM**				D	See notes for TDISNUM.

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Have any employees received a formal written warning in the last 12 months?	**TWARNING**	**HWARNING**	J38_D1	X	X	D	
Have any employees had a deduction from their pay in the last 12 months?	**TDEDUCT**	**HDEDUCT**	J38_D5	X	X	D	
Have any employees been suspended in the last 12 months?	**TSUSPEND**	**HSUSPEND**	J38_D2, J38_D3, J38_D4	X	X	D	
How many employees have received a formal written warning, had a deduction from their pay or been suspended in the last 12 months? (where TWARNING=1, TDEDUCT=1 or TSUSPEND=1)	**TSANCNUM**	**HSUSNUM**	J39	X	X	C	
Number of negotiating groups (1; 2; 3+) (where TRECOG=1)	**TNGROUP1**	**EJOINT EGROUPS**	C18	X	X	Cat	1980, 1984: recorded separately for manual and non-manual data - possibility of double-counting precludes derivation 1998: TNGROUP1 assumed to be 1 where TTOTREC=1
Number of negotiating groups (1; 2; 3+) (where TTOTREC>1)	**TNGROUP2**	**EJOINT EGROUPS**	C18	X	X	Cat	1980, 1984: recorded separately for manual and non-manual data - possibility of double-counting precludes derivation
Number of employees covered by collective bargaining	**TALLCOV**	**FSOC1-FSOC9**	Derived from TCOVPC	34A, TOT3, 83A, TOT8	X	C	1998: Uses edited FSOC data from Fsocfix.sps

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Percentage of employees covered by collective bargaining	**TCOVPC**	**Derived from TALLCOV & TALLEMPS**	PTOTEMPC (from C19)	Derived from TALLCOV & TALLEMPS	X	C	See comments on TALLCOV.
Percentage of employees covered by collective bargaining (banded)	**TCOVPC6** **TCOVPC7** **TCOVPC4** **TCOVPC3** **TCOVPC2**	**Derived in same vein as TCOVPC (in annual syntax files, rather than in Mergets.sps, with exception of TCOVPC2)**				Cat Cat Cat Cat Cat	6 bands: 100%; 80-99; 50-79; 20-49; 1-19; None 7 bands: 100%; 80-99; 60-79; 40-59; 20-39; 1-19; None 4 bands: 100; 50-99; 1-49; None 3 bands: 50-100%; 1-49%; None 2 bands: 50-100%; None-49%
Any multi-employer bargaining (where TRECOG=1)	**TNATBARG**	**FSOC1-FSOC9**	D7, F7	43A, 92A	39B, 44B, 70B, 75B	D	1980: Missing where more than 2 bargaining units of the same type and no m/e bargaining in surveyed units. 1984, 1990: as above, but only one unit of each type surveyed 1980-90: uses data on most important level of negotiations, since 1998 questions only permit one response. 1998: Uses edited FSOC data from Fsocfix.sps
Any multi-site bargaining (where TRECOG=1)	**TORGBARG**	**FSOC1-FSOC9**	D7, F7	43A, 92A	39B, 44B, 70B, 75B	D	See comments for TNATBARG.
Any workplace level bargaining (where TRECOG=1)	**TESTBARG**	**FSOC1-FSOC9**	D7, F7	43A, 92A	39B, 44B, 70B, 75B	D	See comments for TNATBARG.

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Pay of uncovered workers set by external body (where TCOVPC4=2,3 or 4)	**TEXTSET**	**FSOC1-FSOC9**	D17, D25, D26 F17, F25, F26	48, 49 97, 98	X	D	1980: Missing due to absence of coverage data (TCOVPC4).
Pay of uncovered workers set at higher level in organisation (where TCOVPC4=2,3 or 4)	**TORGSET**	**FSOC1-FSOC9**	D17, D25, D26 F17, F25, F26	48, 49 97, 98	X	D	See comments for TEXTSET
Pay of uncovered workers set at workplace (where TCOVPC4=2,3 or 4)	**TESTSET**	**FSOC1-FSOC9**	D17, D25, D26 F17, F25, F26	48, 49 97, 98	X	D	See comments for TEXTSET
Locus of decision making within main pay determination arrangement (17 categories)	**TPAYDET**	**Derived from TNATBARG to TESTSET** **(in annual syntax files, rather than in Mergets.sps)**				Cat	Categories separated according to values of TCOVPC3 1998: 44 cases coded to 6 where there is reported to be coverage but no recognition (so TNATBARG – TESTBARG missing)
Locus of decision making within main pay determination arrangement (12 categories)	**TPAYDET2**	**Derived from TPAYDET**				Cat	Categories separated according to values of TCOVPC3
Locus of decision making within main pay determination arrangement (7 categories)	**TPAYDET3**	**Derived from TPAYDET**				Cat	Categories *not* separated according to values of TCOVPC3
Any industrial tribunal cases started against employer in last 12 months?	**TCOMPLAI**	**HCOMPLAI**	J40	X	X	D	
Number of tribunal cases started against employer in last 12 months	**TCOMNUM**	**HCOMNUM**	J41	X	X	C	

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Any industrial action (from specified list) in past 12 months (excluding lock-outs)	**TANYACT**	**GACTIO01-GACTIO04**	M2 M4	147A, B	127A 128A	D	Separate recording for manual and non-manual workers abandoned in 1998
Any strike action in past 12 months	**TSTRIKE**	**GACTIO01-GACTIO04**	M4	147A, B	127A 128A	D	See comments for TANYACT
Any non-strike action in past 12 months (excluding lock-outs)	**TOTHACT**	**GACTIO01-GACTIO04**	M4	147A, B	127A 128A	D	See comments for TANYACT
Has establishment been picketed in last 12 months?	**TPICKET**	**GPICKET**	M6	148A	133A	D	
Any profit-related payments or bonuses (where TTRADING=1)	**TPRPAY**	**FVARPAY1 – FVARPAY6**	K24_D1	X	X	D	1990 wording more explicit 1990: "does company operate…" 1998: "do any employees at this establishment receive payments or dividends from …."
Any deferred profit-sharing schemes (where TTRADING=1)	**TDPROF**	**FVARPAY1 – FVARPAY6**	K24_D2	X	X	D	1990 wording more explicit 1990: "does company operate…" 1998: "do any employees at this establishment receive payments or dividends from …."
Any profit-sharing scheme (profit-related payments OR deferred profit-sharing scheme) (where TTRADING=1)	**TPROFSH**	**FVARPAY1 – FVARPAY6**	K24_D1 K24_D2	144B	X	D	See comments on TPRPAY and TDPROF. 1984: "does company operate…"
Any share-ownership schemes (where TTRADING=1)	**TSHOWN**	**FVARPAY1 – FVARPAY6**	K24 K29	144B, E	112A, D	D	1980: Specific question 1984-98: One code on a general question 1984, 90: make explicit mention of share option schemes 1990: refers to two specific types of scheme,

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
							plus catch-all 'other' 1980-90: Coded to 'No' if no employees at the workplace are actually participating, for comparability with 1998 data which focuses on cases where employees receive payments or dividends.
Any employees on fixed term contracts in last 12 months?	**TTEMPLYR**	**JTEMPLYR**	N23	162	142	D	1984, 1990: Interviewer notes specifically exclude YTS and sandwich students 1998: wording broadened to include "employees working on a temporary basis"
Any agency temps in last 12 months?	**TAGENCY**	**JAGENCY**	X	X	141	D	
Any freelance workers in last 12 months?	**TWRKFREE**	**JWRKFREE**	N25	164	140	D	1998: uses term "presently", rather than "in the last 12 months"
Arrangements for dealing with health and safety (detailed)	**THANDS**	**ICOMMTEE** **IJOINT** **IOTHREP** **ICONSUL**	L16	140A	126A	Cat	1998: question format very different from previous years and no showcard used.
Arrangements for dealing with health and safety (summary)	**THANDS2**	**Derived from THANDS**				Cat	Codes 4-20 of THANDS grouped together in 'Other'
Whether employee reps on health and safety committee are chosen by unions or staff assocs. (where TANYMEM=1)	**TAPPHS**	**IREPNUM** **DAPPOIN**	L18	140B	X	D	1998: Compiled from two questions; format very different from previous years

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Any of specified injuries in last 12 months	**TINJURY**	**IINJURY1 TO IINJURY8**	P3	X	X	D	1998: showcard includes physical assault and broadens other categories (may explain why incidence of injuries is much higher than 1990)
Number of injuries in last 12 months	**TNUMINJ**	**INUMINJ**	P4	X	X	C	Caution needed: See comments on TINJURY.
Any reductions in the workforce in the last 12 months?	**TREDUCT**	**JREDUCT**	N10	X	X	D	
Means of achieving workforce reductions in last 12 months (where TREDUCT=1) 1 Natural wastage 2 Redepolyment 3 Early retirement/ voluntary redundancy 4 Compulsory redundancy	**TREDMET1 – TREDMET4**	**JREDMET1-JREDMET5**	N12	X	X	D	
Reasons for workforce reductions in last 12 months (where TREDUCT=1) 1 Lack of demand for products/services 2 Shortage of materials 3 Automation 4 Reorganization of work 5 Improved efficiency 6 Industrial disputes 7 Budget restrictions 8 Subcontracting of work 9 Impending closure 10 Staff shortages	**TREDRE01-TREDRE10**	**JREDREA1-JREDREA8**	N11	X	X	D	

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Any shift-working?	**TSHIFT**	**JTIMEAR**	N18	X	X	D	1998: refers to non-managerial staff only
Sub-contracted activities: 1 Cleaning 2 Security 3 Catering 4 Building maintenance 5 Printing / photocopying 6 Payroll 7 Transport of documents / goods	**TNONEM1-TNONEM7**	**JNONEM01-JNONEM12**	N29	X	X	D	1998: refers to "independent contractors" 1990: refers to people who are not employees of the establishment or organization.
Recruited any permanent staff in last 12 months?	**TANYREC**	**ZCOMMWOR**	N16	X	X	D	1998: specific instruction to include those who arrived and departed within the one year
Single or multiple product(s)/ service(s)? (where TTRADING=1)	**TPROSER**	**KPROSER**	P2, FA20	X	X	D	Routing errors boost number of user-missing values in both 1990 and 1998.
Trend in value of sales for main products or services (where TTRADING=1)	**TVALSAL**	**KVALSAL**	P55 FA95	13B	9	Cat	1980: *demand for* main products or services 1990: priority given to responses from Financial Manager, where both responses recorded. 1990, 1998: Routing errors boost number of user-missing values.
Management collects information on labour costs	**TCOLLEC1**	**KRECPER1-KRECPER9**	B20_d6	X	X	D	1990: working refers to information used to review performance and policies on an annual or more frequent basis 1998: "any of the following records kept for this establishment?"

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Management collects information on productivity	**TCOLLEC2**	**KRECPER1-KRECPER9**	B20_d5	X	X	D	See comments for TCOLLEC1
Management collects information on absenteeism	**TCOLLEC3**	**KRECPER1-KRECPER9**	B20_d2	X	X	D	See comments for TCOLLEC1
Management collects information on workforce training	**TCOLLEC4**	**KRECPER1-KRECPER9**	B20_d7	X	X	D	See comments for TCOLLEC1
Management collects information on gender mix of workforce	**TCOLLEC5**	**IPRACTI1 – IPRACTI6**	B20_d10	X	X	D	See comments for TCOLLEC1
Management collects information on ethnic mix of workforce	**TCOLLEC6**	**IPRACTI1 – IPRACTI6**	B20_d9	X	X	D	1990: whether information on ethnic mix of workforce is collected and used as per comment or TCOLLEC1 1998: whether keep employee records with ethnic origin identified
Evaluation of management-employee relations	**TSTATIR**	**MRELATE**	P63	169	146	Cat	1980-19890: codes 2&3, 5&6 combined to match 1998
Evaluation of financial performance compared with other establishments in same industry (where TTRADING=1)	**TESTPER1**	**KESTPER1**	P59 FB3, FB4	14A	10B	Cat	1980: No further clarification within 'Better' or 'Below'; 'Other ans.' (code 7) recoded to 'DK/NA' (code 9). 1990: Those without clarification (i.e. just 'Better' or 'Below') coded to 2 and 4. Priority given to Financial Manager's response where both recorded. Labels for P59 codes 4 and 5 on deposited WIRS90 data file incorrectly reversed –

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
							corrected file deposited Jan 2002. Coding scheme for P59 detailed on p.86 of User Guide.
Evaluation of labour productivity compared with other establishments in same industry (where TTRADING=1)	**TESTPER2**	**KESTPER2**	P58 FB6	X	X	Cat	1990: comparison is simply with "other similar workplaces"
Labour costs as a proportion of sales revenue (trading sector) or operating costs (non-trading sector)	**TLABCOST**	**KPROSAL**	P56 A33	13C 15B	X	Cat	1990: Many cases not asked question (specifically, where TRADING=1 and (TSINGLE=1 or THO=1)). These cases coded to dedicated code 8 on TLABCOST. Non-response high in all years.
Whether establishment sells its goods/services outside its own organisation (where TTRADING=1 and (TSINGLE=1 or THO=3))	**TSELLS**	**KACTIVI**	P25, P34, P43 FA23, FA46, FA69	9B 10B 11B	X	D	1984, 1990: automatically set to 'Yes' where TSINGLE=1 and THO=3 and respondent does not say that the *majority* of good/service is sold within their own organization.
Percentage of output sold to largest customer (where TSELLS=1)	**TLARGE**	**KLARGE**	P26, P35, P44 FA24, FA47, FA70	X	X	Cat	1990: Continuous variables grouped into 1998 bands
Location of principle market for goods/services (where TSELLS=1)	**TMARKET**	**KMARKET**	P27, P36, P45 FA26, FA49, FA72	9C 10C 11C	X	Cat	
Number of competitors in market (where TSELLS=1)	**TCOMPET**	**KCOMPET**	P28, P37, P46 FA27, FA50, FA70	9D 10D 11D	X	Cat	1984, 1990: Restricted to TSELLS=1 for comparability with 1998
If interviewed at establishment	**TLOCATE**	**MQLOC**	MQLOC	Address Record Form (CARD 3 COLS 19-20)	3	D	Identifies whether interview took place solely at the establishment.

VARIABLE DESCRIPTION	VARIABLE	YEARS FOR WHICH COMPARABLE DATA EXISTS **1998**	**1990**	**1984**	**1980**	TYPE OF VARIABLE	FURTHER INFORMATION
Establishment weight	**WEIGHT**	**EST_WT**	WEIGHT	CARD 21, COLS 73-80	CARD 40, COLS 61-65 Plus ADJUST-MENT FACTOR	C	1980: Employ the adjustment factor used in 1984 sourcebook to boost lower end of distribution (compensating for age of frame). See pages 7 and 329-332 of 1984 sourcebook.
Employee weight (WEIGHT * TALLEMPS)	**EEWEIGHT**	**Derived from WEIGHT and TALLEMPS**				C	See comments for WEIGHT and TALLEMPS.