FEATURE

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New labour productivity measures from the ABI – 1998 to 2005

SUMMARY

This article presents new current price labour productivity data calculated using published data from the Annual Business Inquiry (ABI). This is an update of previous work by Daffin and Lau (2002) where results for 1998 to 2000 were provided. The results in this article contain revised data for this period[1] and new data for 2001 to 2005. The rest of the article discusses the results, the quality of the estimates and also industry-specific data issues.

The Annual Business Inquiry (ABI) is a relatively new survey that was introduced between 1998 and 2001. The main advantage of the ABI over its predecessors is that financial and employment data are collected together in this single survey and aggregates are calculated using a common methodology. Therefore there is greater consistency between output and input data and it is possible to derive coherent labour productivity measures with the results. This article presents such measures and discusses issues regarding their quality, as well as giving reasons why estimates cannot be published for certain industries.

Until recently the Office for National Statistics (ONS) released two sets of labour productivity indices. The Productivity First Release contained quarterly data for the 'Whole Economy', 'Total Production' and 'Total Manufacturing' as well as the manufacturing subsections, based on chained-volume measures (CVM) of gross value added (GVA). In addition, the release 'Labour Productivity Indices for the Non-Production Industries' contained experimental[2] estimates for 'Total Services', 'Distribution, Hotels and Catering' and 'Agriculture, Forestry and Fishery'. However, as of March 2007, all of these series have been brought together in the Productivity First Release, although the series for the non-production sectors are still marked as experimental. Their status is set to be reviewed in time for the December 2007 release, at which point additional series for the service sector may be included if they are judged to be of sufficient quality. Estimates of labour productivity for the market sector will be included in the September release. The Productivity First Release and associated data sets can be found at www.statistics.gov.uk/statbase/product.asp?vlnk=7476

To produce the estimates contained in the First Release, the output data used are from the National Accounts, and the employment estimates are taken from the quarterly Short-Term Employment Survey (STES), and benchmarked to annual ABI data. Therefore, while the official estimates are mainly based on the ABI, National Accounts coherence and balancing adjustments reduce the consistency of the output and input (employment) data. The aim of this article is to provide productivity estimates that have not been subject to such adjustments. In addition, the official productivity estimates are in constant prices to show the evolution of productivity over time. However, the data in this article are in current prices, thus allowing the comparison of productivity levels across industries but maintaining the ability to gauge broad trends across time. The ABI also allows a more detailed analysis of the service sector than is currently provided by official ONS measures.

The results in this article are based on ABI published data which are available on the National Statistics website at www.statistics.gov.uk/abi/
Data for 2005 are final as of June 2007. It

should be noted, however, that the ABI estimates do contain some inconsistency over time. Currently, only estimates for the last two years, 2004 and 2005, are consistent on a rolling basis, as certain quality issues, errors and omissions have not been taken on back to 1998. More consistent output estimates are available from the Input-Output analyses, but these do not contain employment figures necessary to produce productivity measures

Data issues

It should be noted that the GVA measures compiled from the ABI are only approximate as they do not contain adjustments for taxes and subsidies, or received income-in-kind. Therefore they are different from the GVA estimates contained in the Input-Output Supply Use tables which are compiled on a European System of Accounts (ESA) 95 basis. Data contained in the Input-Output analyses also contain the following adjustments:

- **conceptual adjustments** – these are established adjustments used to translate data sources into national accounts concepts. Among these are the exclusion of business spending in the retail sector from household final expenditure and also adjustments for undeclared income in the income measure
- **quality adjustments** – these are further adjustments made after the conceptual adjustments to allow for known biases and discontinuities in the source data, for instance, as a result of revisions analysis. Once the basis for the adjustment becomes clear, it may eventually be added to the methodology as a conceptual adjustment
- **coherence adjustments** – these are adjustments made after the data have been validated against alternative data sources and there has been an analysis of any discrepancies

For further detail see Penneck and Mahajan (1999).

For industries where the ABI estimate of approximate GVA per job is considered flawed, the estimate has been withdrawn. The industries where this applies are:

- SIC (2003) divisions 1 ('Agriculture, Hunting and related service activities'), 2 ('Forestry, logging and related service activities') and 5 ('Fishing') – although financial data for these industries have been collected since 2000 (2001 in the case of division 1), approximate GVA per job estimates have not been published. These are excluded mainly because the data are relatively new as well as the prevalence of grants and subsidies in these industries
- SIC (2003) division 62 ('Air Transport') – the ABI time series is of poor quality with changes being more reflective of improved measurement over time rather than real economic change. Therefore estimates for this industry and its subsections have been withdrawn
- SIC (2003) divisions 65–67 ('Financial Intermediation') and 75 ('Public Administration and Defence; Compulsory Social Security') – financial data for these industries are either not collected by the ABI or, in the case of divisions 65–67, not currently published. Only data for activities auxiliary to financial intermediation are collected. Therefore, estimates for these industries are not available
- SIC (2003) division 70 ('Real Estate Activities') – this estimate has been withdrawn as the approximate GVA measure excludes capital expenditure. The nature of the industry means GVA is not a representative measure. For instance, in the early years of a development, there will be high levels of capital expenditure but no turnover and vice-versa in following years.
- SIC (2003) divisions 73 ('Research & Development') are affected by the exclusion of government grants, affecting the GVA values,[3] and are therefore withdrawn. Parts of SIC (2003) 91.1 and 91.3 (both within 'Activities of Membership organisations not elsewhere classified') are similarly affected and are therefore withdrawn
- SIC (2003) divisions 80 ('Education') and 85 ('Health and Social Work') – estimates for these industries have been withdrawn for two reasons. Firstly the estimate would not be representative of the industry as a whole as the ABI is not sent to public bodies, and secondly Government grants are again excluded from the data, sometimes resulting in negative GVA values

There are other industries where, although labour productivity estimates are published, users should exercise caution when interpreting the results. These are:

- SIC (2003) divisions 15.9 ('Manufacture of beverages'), 16 ('Manufacture of tobacco products') and 51.3 ('Wholesale of food, beverages and tobacco') – GVA estimates for industries involving alcohol and tobacco can be volatile. The reason for this is that the timing of the release of goods from bonded warehouses changes to minimise duty

Box 1

Methodology used to calculate ABI year-average employment

ABI year-average employment = ABI year-average employees + ABI working proprietors + ABI unpaid workers

Year-average employees are calculated by taking the point-in-time ABI data, at the reporting unit level, and then applying factors from the STES data (local unit level). For instance, for 2005:

(Stes December 2004+(3* Stes March 2005)+(3* Stes June 2005)+ (3* Stes September 2005)+(2* Stes December 2005))/12* Stes December 2005)

This is done separately for each of the male/female/full-time/part-time splits by STES SIC section building blocks. They are applied to the December returns before grossing, to bring employment figures to a year-average level.

There are no STES data on working proprietors or unpaid workers that can be used to adjust these two series. Working proprietor data exist on the IDBR and unpaid workers are available from the Labour Force Survey, but these series cannot be considered reliable enough to adjust the ABI data at three-digit SIC level. These data are therefore December estimates and may contain seasonality.

payments, as shown by the results for SIC (2003) divisions 51.35 to 51.37 where productivity levels move from 6.6 in 1998 to 117.3 in 1999 and to 19.3 in 2003

- SIC (2003) division 23.2 ('Manufacture of refined petroleum products') – a similar problem arises in this industry. Firms in this sector can change the point at which they report their duty payments so, for example, one year, payments will appear in wholesale, and another year in refining. This is a general problem that can also affect other industries. Attempts are made by ONS to minimise such differences but caution should still be exercised when comparing data across years

- Finally, due to volatility and issues with data quality:

  - SICs 1110 and 1120 have been aggregated to 1100
  - SICs 2111 and 2112 have been aggregated to 2110
  - SICs 5111 to 5119 have been aggregated to 5110
  - SICs 5121 to 5125 have been aggregated to 5120
  - SICs 5135 to 5137 have been aggregated to 5135–37
  - SICs 5271 to 5274 have been aggregated to 5270
  - SICs 5511 and 5512 have been aggregated to 5510
  - SICs 7230 and 7240 have been aggregated to 72.3/72.4

In addition, for some industries at SIC (2003) four-digit level, estimates are not published because they are deemed to be disclosive. Also, where the estimate of employment is less than 500, the data have been suppressed. However, data for these industries are included within broader aggregates such as the two-digit and section level estimates.

The denominator used in the productivity estimates presented in this article is ABI year-average employment. The methodology used to create this variable is provided in **Box 1**. It is calculated by adjusting the annual point-in-time ABI estimate using quarterly STES data. This method is preferred because although it means some of the consistency between the output and employment data is lost, it also means that any seasonality is removed. It should be noted that this variable is based on the number of full-time and part-time workers at a point in time and then adjusted to produce a year-average figure. Therefore it is not based on a measure of full-time equivalents. The impact of this on labour productivity estimates should be borne in mind when interpreting the results. For instance, part-time workers are far more prevalent in the service sector compared with manufacturing, thus artificially reducing the labour productivity estimate in services. At some point in the future attempts may be made to produce estimates for the number of full-time equivalents.

Pre ABI data

Although approximate GVA data are published from 1995, employment data that are consistent with this are only published from 1998. Between 1995 and 1998, employee data were collected using the Annual Employment Survey (AES). Due to methodological and coding differences between the AES and ABI, the AES is not used to derive labour productivity estimates before 1998.

Analysis of results

The main value in the following set of results lies in its level of sectoral detail. Official productivity data for the service sector are relatively sparse, with only indices for 'Total services' and 'Distribution, hotels and catering' currently produced (although the series may be expanded to split the latter in the near future). In contrast, the ABI provides information down to the SIC four-digit level. However, it should again be noted that the data are in current prices, meaning they allow comparisons across industries, but do not show real changes across time. Also, as mentioned above, the ABI does not provide complete coverage of the service sector with sections J ('Financial Intermediation') and L ('Public Administration and Defence') not covered, and data for sections M ('Education') and N ('Health and Social Work') being unrepresentative of the industry.

In general, the service sector tends to exhibit lower labour productivity levels, and also growth, than the production sector, a phenomenon commonly referred to as 'Baumol's Disease' or the 'Baumol Effect' (Baumol and Bowen 1966). The theory is that services are much more labour intensive than the production sector and benefit from technological advance to a much lesser extent. In general, although not always, the product of labour is the service itself, rather than a means to production – the common example given by Baumol is that it takes the same number of musicians to play a Beethoven string quartet today as it did in the 19th century. This applies to various service sector industries – for instance, it is hard to conceive of how productivity improvements among hairdressers could be as significant as those among manufacturers, where capital intenisty is far greater. However, for many service sector industries, this appears

Table 1
ABI 'approximate GVA per job', current prices

SIC03 section	Description	1998	1999	2000	2001	2002	2003	2004	2005
									£ thousand
C-O[1]	All sectors covered by the ABI	28.8	30.3	31.3	32.3	33.0	34.2	36.3	38.4
C-E	Production sector	38.5	40.4	42.7	43.7	46.5	47.2	51.7	56.3
C-F	Production sector plus construction	36.1	38.0	40.1	41.8	43.9	45.3	49.0	53.1
G-O[1]	Service sector	25.3	26.8	27.5	28.4	28.8	30.1	31.8	33.4
									Ratio to all sectors (C-O[1]) = 1.00
C-O[1]	All sectors covered by the ABI	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C-E	Production sector	1.34	1.33	1.37	1.35	1.41	1.38	1.42	1.46
C-F	Production sector plus construction	1.25	1.25	1.28	1.30	1.33	1.33	1.35	1.38
G-O[1]	Service sector	0.88	0.88	0.88	0.88	0.87	0.88	0.88	0.87

Note:
1 Excludes SIC03 sections A, B, J, L, M, N and division 70 (section K).

to be changing with the development in information and communication technology (ICT) which has resulted in massive innovation to both products and processes in much of the service sector, particularly in finance and business services (OECD 2007).

Results for broad sector levels are provided in Table 1. The data seem to support Baumol's theory, although there is also the issue that many of the improvements in the quality of the output of the service sector are not adequately captured in official data, meaning productivity in this sector is actually understated. The greater employment of part-time workers in services compared with production also has an impact, as discussed previously. The second part of the table shows that the service sector achieves just 87 to 88 per cent of the average productivity level of all sectors, compared with 133 to 146 per cent in the production sector. This picture is supported by Figure 1 which charts average real annual growth in labour productivity since 1980 (Productivity First Release).

Table 2 shows that, by 2005, while the ratio of employment in the service sector to production sector was over four, GVA was only 2.5 times greater than that created in the production sector. Therefore, labour productivity in services is just 60 per cent of the level in production. Between 1998 and 2005, the productivity gap between production and services has widened slightly, and is probably the result of labour resources being drawn from the production sector into services.

While disparities in broad section-level data are interesting, there is also huge variation in performance within these sectors. To illustrate this, the following chart, **Figure 2**, ranks SIC divisions (two-digit) in terms of their labour productivity performance, from 1 to 43, for 1998 to 2005.

Figure 1
Average annual real growth rates of output per job

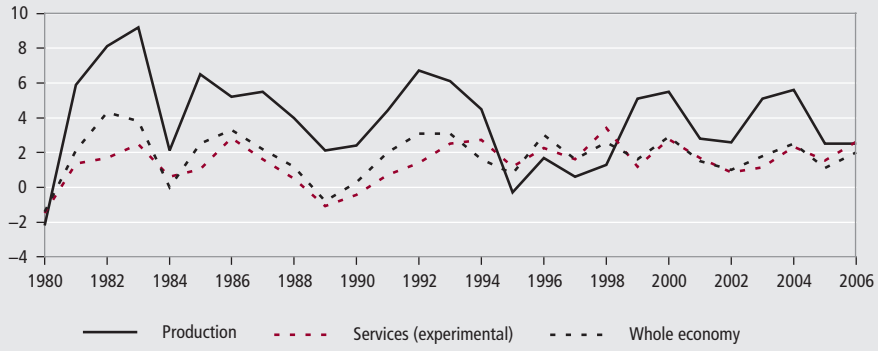
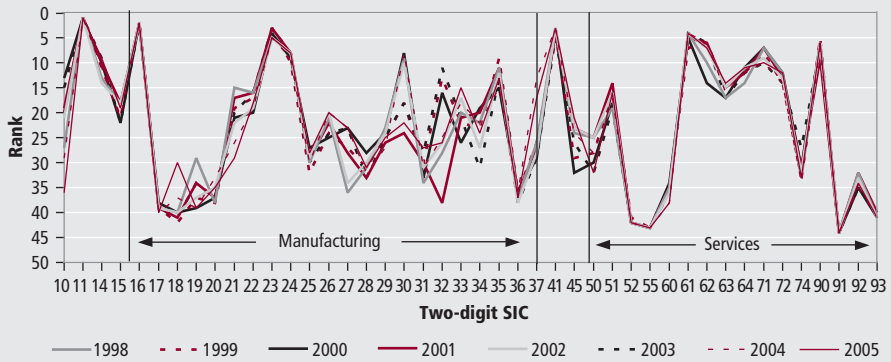


Table 2
Ratio of service sector (G–O) to production sector (C–E)

	1998	1999	2000	2001	2002	2003	2004	Ratio 2005
Year-average employment	2.66	2.84	3.03	3.24	3.53	3.68	3.86	4.11
Approximate GVA	1.75	1.89	1.95	2.11	2.19	2.34	2.38	2.44

Figure 2
Relative productivity performance



Performance varies greatly within each broad sector and is consistent across years. The industry with the best performance in each of the eight years is division 11 (extraction of crude petroleum and natural gas), partially explained by the high level of capital intensity in this industry and also the high oil prices witnessed in recent years. In second place, every year for each of the eight years, was division 16 (manufacture of tobacco products), although these figures will be affected by the timing of duty payments as discussed earlier.

Other industries that consistently ranked high in the period studied were:

- division 23 (manufacture of coke, refined petroleum products and nuclear fuel)
- division 41 (collection, purification and distribution of water)

Again this is likely to be reflective of the level of capital intensity in these industries as well as the level of automation in business processes.

Looking more closely at the service sector, the highest ranked industries were:

- division 61 (water transport)
- division 71 (renting of machinery and equipment without operator and of personal and household goods)
- division 90 (sewage and refuse disposal, sanitation and similar activities)

In distribution there was a marked difference in performance between wholesale (division 51) and retail (division 52), with the latter coming out near the bottom. This is partially a reflection of the level of labour intensity in this industry, although it contrasts with the performance of the retail sector in other countries, most notably the US. However, it should again be noted that this analysis is based on the number of jobs with no distinction made between full-time and part-time workers. As part-time workers make up such a significant proportion of employment in this sector, the productivity measures here probably understate the sector's true performance. The same argument applies to division 55 (hotels and restaurants). Labour productivity for the main service industries can be seen in Table 3.

In recent years there has been considerable interest in the main ICT-related industries because of their strong productivity performance. **Table 4** shows the productivity ranking of the main ICT-related industries, with the median rank

Table 3
ABI 'approximate GVA per job' for the major service sectors, current prices

£ thousand

SIC03	Description	1998	1999	2000	2001	2002	2003	2004	2005
51	Wholesale trade and commission trade, except of motor vehicles and motorcycles	38.5	40.3	38.7	43.2	41.4	44.4	48.5	49.2
52	Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	14.8	16.4	16.6	16.8	17.4	18.0	18.9	19.5
55	Hotels and restauraunts	11.3	11.9	12.6	13.1	13.8	13.6	15.0	14.9
Section I: 60-64	Transport, storage and communication	38.8	40.5	41.6	41.3	41.5	45.4	47.5	50.4

Table 4
Productivity performance of industrial subsections handling ICT

Ranking

SIC03 division	Description	1998	1999	2000	2001	2002	2003	2004	2005
30	Manufacture of office machinery and computers	8	18	18	24	9	10	8	22
32	Manufacture of radio, televisions and communication equipment and apparatus	16	13	11	38	28	26	25	26
64	Post and telecommunications	11	12	12	12	14	11	12	11
71	Renting of machinery and equipment without operator and of personal and household goods	7	8	10	7	7	9	10	10
72	Computer and related activities (including hardware and software consultancy)	12	14	14	13	12	13	14	12

for all industries being 22 or 23. As can be seen, almost all of these industries in general performed better than the average with the main exception being division 32 ('Manufacture of radio, televisions and communication equipment and apparatus'), whose rank has declined significantly since 1998.

Therefore, where gaps exist in labour productivity measures, particularly at a detailed level in the service sector, ABI data can provide a useful resource in comparing performance across industries. However, its limitations should be noted, mainly:

- that it cannot be used to show real growth – prices are very volatile in certain sectors, especially those related to oil or ICT. Therefore caution must be exercised when comparing across sectors let alone time
- that key sectors in the UK economy have no data, particularly sections J (Financial intermediation) and L (Public administration and defence)
- that the ABI does not capture improvements in the quality of service sector output as they will not be fully reflected by higher prices
- that there is no information on the breakdown of hours worked per employee
- the fact that for some industries the ABI is not representative of the real economy
- and finally other reporting and accounting issues discussed previously in the article

Presented in the Appendix are labour productivity estimates at section and two-digit level in **Table A1** and **Table A2,** respectively. Estimates at four-digit level are available in Table A3 in the electronic version of this article at www.statistics.gov.uk/statbase/product.asp?vlink=14692

Notes

1 The main differences between this data set and that previously published lies in revisions made to data from 1998 to 2000. The data used this time are also more accurate with GVA being in £ thousands and employment in actuals, rather than £ millions and thousands respectively, which also causes some differences.

2 Experimental statistics are statistics that are in testing phase and have not yet been fully developed. Therefore they do not have National Statistic status.

3 Much R&D activity takes place within the non-market sector where different concepts and processes are used to calculate GVA. For further information see ONS (2006), pp 187–210.

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Table A1

Current price 'approximate GVA per job' for 1998 to 2005, industry section (excluding SIC divisions 12, 65–67, 70, 75–85 and also 13 in 2003–2005)

£ thousand

Section			1998	1999	2000	2001	2002	2003	2004	2005
C-O		All sectors covered by the ABI	28.7	30.1	31.1	32.1	32.8	34.0	36.1	38.2
C-F		Production sector plus construction	36.1	38.0	40.1	41.8	43.9	45.3	49.0	53.1
C-E		Production sector	38.5	40.4	42.7	43.7	46.5	47.2	51.7	56.3
G-O		Service sector	25.2	26.5	27.2	28.1	28.6	29.8	31.4	33.1
H-O		Service sector excluding wholesale and retail trade	26.7	27.7	29.0	29.6	30.2	31.3	33.1	35.4
C		Mining and quarrying	162.8	198.3	297.4	316.3	288.1	260.5	297.9	369.9
	CA	Mining and quarrying of energy-producing materials	238.0	295.7	496.0	533.0	472.2	428.6	477.9	601.4
	CB	Mining and quarrying except energy-producing materials	49.9	52.8	53.5	55.5	49.8	48.3	61.6	74.0
D		Manufacturing	33.9	35.2	35.9	36.6	39.3	40.2	43.7	45.1
	DA	Manufacture of food products, beverages and tobacco	35.9	37.4	38.0	39.8	43.4	44.7	47.7	48.6
	DB	Manufacture of textiles and textile products	19.6	18.7	19.9	22.8	24.4	25.0	26.4	29.7
	DC	Manufacture of leather and leather products	20.1	24.4	28.9	28.6	34.4	27.8	27.0	30.0
	DD	Manufacture of wood and wood products	25.0	23.3	25.9	25.7	26.9	30.2	33.7	34.8
	DE	Manufacture of pulp, paper and paper products; publishing and printing	36.1	39.4	40.6	40.4	42.7	42.0	45.4	45.4
	DF	Manufacture of coke, refined petroleum products and nuclear fuel	84.0	120.0	88.9	97.5	87.3	84.4	103.4	92.8
	DG	Manufacture of chemicals, chemical products and man-made fibres	52.5	55.2	60.9	62.5	63.5	66.8	70.8	77.5
	DH	Manufacture of rubber and plastic products	29.8	28.9	30.7	31.8	33.2	34.1	36.0	38.0
	DI	Manufacture of other non-metallic mineral products	32.8	33.5	34.8	36.0	40.1	41.9	46.1	46.0
	DJ	Manufacture of basic metals and fabricated metal products	30.4	29.5	30.2	30.7	31.5	32.6	35.6	37.3
	DK	Manufacture of machinery and equipment not elsewhere classified	33.0	32.7	33.5	32.8	36.9	38.8	39.8	42.2
	DL	Manufacture of electrical and optical equipment	35.2	36.6	39.1	31.4	37.4	39.7	44.2	43.5
	DM	Manufacture of transport equipment	39.9	42.8	38.2	43.8	45.3	43.2	48.1	49.7
	DN	Manufacturing not elsewhere classified	25.6	26.3	25.4	27.8	27.9	28.2	32.1	33.7
E		Electricity, gas and water supply	109.9	114.9	107.2	110.6	132.2	127.4	135.5	169.9
F		Construction	27.2	29.8	31.6	35.9	36.7	40.0	41.9	45.4
G		Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	22.7	24.5	23.9	25.6	25.7	27.0	28.6	28.8
H		Hotels and restaurants	11.3	11.9	12.6	13.1	13.8	13.6	15.0	14.9
I		Transport, storage and communication	38.5	38.5	39.7	39.5	40.4	43.6	45.4	48.7
K		Real estate, renting and business activities	31.1	32.1	34.0	34.4	34.8	36.4	38.2	40.9
O		Other community, social and personal service activities	23.0	25.0	25.1	26.3	27.0	27.4	29.4	32.2

Table A2

Current price 'approximate GVA per job' for 1998 to 2005, two-digit SIC (excluding SIC divisions 12, 13, 40, 65–67, 70, 73 and 75–85)

£ thousand

SIC03		1998	1999	2000	2001	2002	2003	2004	2005
10	Mining of coal and lignite; extraction of peat	46.1	37.0	41.9	37.7	35.8	40.2	36.9	32.1
11	Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction excluding surveying	330.1	419.2	703.0	766.0	657.3	573.5	611.5	744.4
14	Other mining and quarrying	50.3	52.9	53.5	55.5	49.8	48.3	61.6	74.0
15	Manufacture of food products and beverages	33.9	35.3	35.9	38.2	41.4	42.8	45.5	*
16	Manufacture of tobacco products	166.3	188.4	211.3	178.9	245.6	211.2	250.6	*
17	Manufacture of textiles	21.8	21.1	22.5	24.0	25.0	26.5	25.2	26.6
18	Manufacture of wearing apparel; dressing and dyeing of fur	17.0	15.9	16.8	21.0	23.4	22.7	28.8	36.2
19	Tanning and dressing of leather; manufacture of handbags, saddlery, harness and footwear	20.1	24.4	28.9	28.6	34.4	27.8	27.0	30.0
20	Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	25.0	23.3	25.9	25.7	26.9	30.2	33.7	34.8
21	Manufacture of pulp, paper and paper products	35.1	38.0	37.7	39.2	43.1	40.2	40.7	37.4
22	Publishing, printing and reproduction of recorded media	36.4	39.9	41.4	40.7	42.6	42.4	46.5	47.3
23	Manufacture of coke, refined petroleum products and nuclear fuel	84.0	120.0	88.9	97.5	87.3	84.4	103.4	92.8
24	Manufacture of chemicals and chemical products	52.5	55.2	60.9	62.5	63.5	66.8	70.8	77.5
25	Manufacture of rubber and plastic products	29.8	28.9	30.7	31.8	33.2	34.1	36.0	38.0
26	Manufacture of other non-metallic mineral products	32.8	33.5	34.8	36.0	40.1	41.9	46.1	46.0
27	Manufacture of basic metals	33.8	30.6	34.8	32.0	29.3	30.5	43.5	43.8
28	Manufacture of fabricated metal products, except machinery and equipment	29.4	29.2	28.9	30.4	32.1	33.1	33.9	35.8
29	Manufacture of machinery and equipment not elsewhere classified	33.0	32.7	33.5	32.8	36.9	38.8	39.8	42.2
30	Manufacture of office machinery and computers	52.9	38.2	39.0	35.5	61.2	62.9	73.5	45.1
31	Manufacture of electrical machinery and apparatus not elsewhere classified	26.8	29.8	31.2	30.7	30.4	32.4	35.6	38.3
32	Manufacture of radio, television and communication equipment and apparatus	42.9	47.8	51.7	24.1	35.0	37.5	41.7	39.4
33	Manufacture of medical, precision and optical instruments, watches and clocks	32.6	34.0	36.5	37.3	40.3	43.1	48.2	50.9
34	Manufacture of motor vehicles, trailers and semi-trailers	37.4	33.8	30.4	37.4	37.5	37.3	43.9	43.2
35	Manufacture of other transport equipment	43.6	55.5	48.9	52.0	56.2	51.4	53.8	58.0
36	Manufacturing of furniture; manufacturing not elsewhere classified	25.5	26.1	25.1	27.4	27.3	27.6	29.7	32.0
37	Recycling	28.9	30.9	30.7	32.7	35.9	36.3	59.2	49.1
41	Collection purification and distribution of water	94.6	91.8	78.4	94.4	129.5	104.7	117.2	154.1
45	Construction	27.2	29.8	31.6	35.9	36.7	40.0	41.9	45.4
50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	28.2	30.2	29.6	33.6	36.5	38.7	39.6	35.8
51	Wholesale trade and commission trade, except of motor vehicles and motorcycles	38.5	40.3	38.7	43.2	41.4	44.4	48.5	49.2
52	Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	14.8	16.4	16.6	16.8	17.4	18.0	18.9	19.5
55	Hotels and restaurants	11.3	11.9	12.6	13.1	13.8	13.6	15.0	14.9
60	Land transport; transport via pipelines	25.9	27.3	28.6	27.9	29.5	28.6	27.3	30.7
61	Water transport	70.1	61.9	78.9	85.0	106.2	85.3	112.4	120.7
63	Supporting and auxiliary transport activities; activities of travel agencies	42.3	42.8	39.5	41.7	41.5	45.2	48.5	51.8
64	Post and telecommunications	50.1	48.1	50.5	48.4	48.2	57.2	60.8	63.8
71	Renting of machinery and equipment without operator and of personal and household goods	59.0	57.1	52.8	63.4	66.3	65.9	64.6	71.4
72	Computer and related activities	46.7	47.0	44.2	46.4	50.0	51.1	56.2	61.6
74	Other business activities	27.3	28.2	31.4	30.6	30.5	32.1	33.5	35.6
90	Sewage and refuse disposal, sanitation and similar activities	66.0	74.7	62.8	56.2	82.1	76.3	75.4	89.9
91	Activities of membership organisations not elsewhere classified	11.2	10.6	8.8	8.1	8.9	8.1	10.2	10.4
92	Recreational, cultural and sporting activities	25.7	27.6	28.7	30.4	31.3	31.3	32.5	35.5
93	Other service activities	16.6	19.2	20.6	22.5	20.2	21.7	23.7	25.1

Table A3

Current price 'approximate GVA per job' for 1998 to 2005, four-digit SIC (excluding SIC divisions 12, 13, 40, 65–67, 70, 73 and 75–85)

£ thousand

SIC03	1998	1999	2000	2001	2002	2003	2004	2005
Mining and quarrying including oil and gas extraction								
1010	46.7	36.9	42.1	37.6	34.7	40.2	37.0	32.2
1100	330.1	419.2	703.0	766.0	657.3	573.5	611.5	744.4
1411	49.5	28.4	46.4	53.4	53.7	51.8	54.2	49.0
1412	48.2	59.4	*	50.1	52.9	*	*	*
1421	56.8	58.8	56.9	59.5	50.5	48.1	69.2	90.4
1422	36.5	44.6	47.6	41.3	41.9	43.5	44.3	47.5
1430	43.2	39.3	38.1	41.9	40.1	49.3	50.2	*
1440	70.0	75.5	80.5	63.6	87.1	86.7	63.7	*
1450	18.5	38.4	56.9	55.4	54.3	43.9	54.2	*
Manufacturing								
1511	22.9	25.5	22.5	26.1	28.4	31.6	33.0	34.8
1512	17.5	17.2	20.1	25.1	29.2	24.0	23.4	24.4
1513	26.4	24.2	25.1	25.9	28.7	29.2	28.0	30.9
1520	17.7	17.6	17.5	21.5	22.6	24.3	26.4	29.2
1531	38.2	60.3	57.7	56.4	56.5	60.5	64.6	62.0
1532	29.9	51.8	54.1	50.7	48.1	50.2	52.2	54.8
1533	31.7	29.5	28.3	38.5	31.3	30.1	34.8	34.8
1551	35.0	31.0	34.8	34.9	47.7	45.0	38.3	37.7
1552	34.5	27.5	27.3	25.7	34.1	42.5	39.2	40.9
1561	66.9	62.6	61.2	58.3	*	*	*	76.1
1562	76.8	48.5	66.0	86.4	*	*	*	39.8
1571	29.0	38.9	20.3	32.1	40.0	43.8	39.4	37.0
1572	63.2	58.7	60.8	65.0	78.1	63.4	79.3	87.0
1581	17.2	18.5	20.6	21.7	24.4	26.5	29.4	26.6
1582	23.9	24.4	26.3	26.4	24.9	30.0	35.1	46.9
1584	46.3	45.7	55.7	60.3	62.6	76.5	90.4	89.6
1586	52.5	78.1	100.1	99.7	101.5	111.6	101.9	139.9
1587	39.9	35.8	32.8	39.3	47.4	56.2	54.9	67.1
1589	*	36.0	36.6	38.8	36.9	45.2	45.7	50.2
1591	83.3	72.3	78.5	83.3	87.4	104.9	135.4	142.8
1596	57.1	74.9	68.1	62.6	69.1	58.2	53.7	52.8
1597	47.8	35.7	40.5	55.7	47.5	69.2	57.8	54.6
1598	54.2	63.4	55.2	60.0	54.6	63.7	71.2	62.9
1600	166.3	188.4	211.3	178.9	245.6	211.2	*	*
1711	22.8	18.7	30.4	35.1	65.0	*	*	*
1712	22.5	27.8	25.6	27.3	23.1	23.0	20.6	29.8
1713	17.9	20.4	28.5	24.3	31.5	23.2	23.3	26.7
1716	26.5	16.6	21.9	22.5	22.8	22.5	24.0	14.4
1721	21.5	17.5	22.2	24.6	27.5	17.3	25.0	15.0
1722	20.8	29.3	18.2	22.2	22.9	29.8	24.0	14.1
1723	24.8	21.6	19.1	33.8	22.9	22.7	21.4	19.1
1724	27.1	27.2	25.4	29.7	31.9	35.0	32.6	30.2
1725	26.8	12.5	19.6	18.8	*	*	10.7	*
1730	25.9	23.2	25.7	29.8	33.6	33.7	28.7	23.8
1740	16.5	21.0	20.0	22.6	20.9	27.2	23.5	28.4
1751	25.9	25.4	26.2	25.4	29.6	28.1	30.1	35.8
1752	28.7	24.9	26.1	31.7	23.5	28.8	30.0	23.7
1753	37.4	32.9	31.5	31.0	43.6	35.7	34.4	39.7
1754	25.8	19.0	24.1	25.1	21.9	28.0	29.7	27.3
1760	28.2	21.7	24.8	24.6	28.9	26.3	23.3	17.9
1771	22.4	20.4	15.8	17.2	26.0	19.7	20.7	23.5
1772	16.1	16.0	20.2	14.9	18.7	15.2	17.2	17.4
1810	25.8	33.5	20.1	15.1	23.3	44.4	49.2	*
1821	17.2	15.9	24.8	20.9	31.1	22.4	25.4	31.7
1822	14.9	17.1	16.8	24.1	26.5	27.6	32.7	39.8

Table A3
Continued

£ thousand

SIC03	1998	1999	2000	2001	2002	2003	2004	2005
1823	20.1	14.6	17.6	20.6	16.2	24.6	22.4	30.1
1824	17.8	14.2	14.1	17.7	20.8	16.6	27.5	36.6
1910	22.2	29.7	28.4	21.2	34.0	36.2	40.8	41.1
1920	20.3	26.3	20.3	19.2	29.8	21.7	24.3	31.2
1930	19.7	22.8	33.1	36.2	36.7	28.9	24.7	25.7
2010	27.1	27.5	23.5	23.2	28.0	31.4	33.7	40.5
2020	43.3	38.5	37.9	32.2	35.8	40.8	44.4	43.2
2030	21.3	20.4	26.0	26.1	27.1	30.8	34.9	34.4
2040	28.6	21.8	25.2	24.6	23.0	25.7	27.9	29.9
2051	23.4	21.2	22.6	23.8	23.6	24.5	25.6	*
2052	25.5	18.4	28.8	*	*	29.9	*	*
2110	43.7	49.5	46.8	51.9	61.2	51.9	47.6	50.9
2121	31.9	30.8	29.9	31.1	34.0	34.2	37.6	38.3
2122	44.8	43.9	52.0	55.5	66.4	59.6	52.4	15.7
2123	29.8	35.4	36.7	29.8	30.9	37.3	38.5	37.5
2124	24.7	55.0	32.9	45.0	40.1	32.8	30.4	44.3
2125	29.5	35.3	40.3	36.7	34.0	30.0	32.6	33.2
2211	44.2	59.0	49.0	50.8	52.7	56.1	55.9	69.7
2212	51.1	53.8	55.2	50.6	51.7	47.8	55.1	54.3
2213	42.4	45.2	50.4	46.9	48.7	59.5	56.5	60.3
2214	99.7	26.6	46.1	48.3	78.4	75.1	40.8	39.3
2215	10.9	24.7	25.7	33.3	35.7	22.3	37.7	35.2
2222	31.9	33.7	35.6	34.6	36.9	34.2	39.5	36.7
2223	27.4	26.8	25.7	25.5	25.5	27.4	29.4	30.2
2225	29.8	30.8	37.8	39.1	37.9	31.0	39.0	50.5
2231	62.2	46.0	63.6	39.6	27.9	52.2	61.8	47.5
2232	51.6	53.4	43.3	53.9	55.1	48.3	49.2	45.1
2233	43.0	47.8	21.4	35.9	40.5	46.1	21.5	62.6
2320	114.4	171.3	121.0	*	*	*	*	*
2330	60.5	83.9	60.4	*	*	*	*	*
2413	33.5	35.4	42.7	55.4	59.2	67.9	66.9	66.6
2414	81.6	63.4	74.2	84.1	100.7	86.1	99.1	111.8
2415	37.8	41.1	53.2	55.7	55.2	69.7	68.6	61.9
2416	41.9	39.1	54.6	44.3	45.8	60.2	52.9	48.5
2417	41.2	46.2	53.9	66.9	56.1	65.5	67.1	63.1
2420	69.6	69.6	83.6	75.7	89.1	85.6	83.4	78.1
2430	38.4	37.5	41.8	39.7	48.4	48.8	57.2	58.9
2441	35.0	52.7	39.6	50.9	38.8	40.5	31.1	33.9
2442	73.7	76.4	82.6	94.7	81.6	96.2	95.7	121.6
2451	31.7	39.9	36.8	38.7	46.7	42.7	63.2	62.3
2452	38.5	49.8	64.2	55.9	50.3	50.0	48.5	44.6
2461	35.3	29.0	33.0	33.6	29.0	35.4	38.1	37.0
2462	51.1	42.6	56.8	48.9	53.7	46.4	63.5	65.3
2463	40.3	42.3	47.7	47.7	54.1	54.8	66.0	77.0
2464	70.7	121.8	51.5	49.7	47.4	46.1	*	65.0
2465	34.2	44.7	38.2	40.3	39.3	44.5	*	49.8
2466	52.5	47.1	60.8	54.6	52.2	52.9	60.7	59.1
2470	52.7	53.9	67.9	53.7	128.2	98.0	73.5	75.6
2511	43.4	43.9	37.0	43.1	66.9	66.6	70.3	69.5
2512	21.1	22.3	24.2	19.6	24.0	28.9	22.5	42.9
2513	27.6	26.9	30.4	27.5	33.8	35.1	34.7	37.6
2521	33.9	32.3	38.0	42.1	39.1	38.7	38.9	41.6
2522	34.7	31.7	31.6	35.4	34.5	36.6	41.2	42.2
2523	25.7	25.7	27.8	30.9	29.7	30.3	32.7	34.8
2524	26.6	26.5	27.8	25.8	27.8	28.9	31.6	32.7

Table A3
Continued

£ thousand

SIC03	1998	1999	2000	2001	2002	2003	2004	2005
2612	*	*	23.2	*	32.6	*	*	*
2613	40.7	44.8	44.1	44.3	47.4	48.3	54.6	53.6
2614	34.7	33.9	35.8	35.3	27.2	42.7	55.5	56.7
2615	28.2	17.4	47.6	36.1	25.8	35.3	41.6	31.0
2621	18.1	15.7	17.0	16.7	19.3	21.6	22.9	23.5
2622	36.1	44.2	40.9	40.0	43.7	43.7	77.4	*
2624	41.5	23.7	*	*	*	*	*	*
2625	10.7	14.6	19.1	28.3	7.0	20.1	23.2	28.3
2626	28.6	31.5	33.2	29.3	31.3	32.1	28.5	40.0
2630	29.6	22.0	21.4	20.9	15.9	24.2	32.6	29.5
2640	36.7	36.9	33.0	37.0	38.8	45.9	49.4	48.4
2651	64.4	77.1	95.6	96.0	97.0	115.2	82.3	69.5
2661	33.0	33.2	32.9	35.3	42.7	41.7	48.2	48.2
2662	122.3	124.5	114.3	153.6	145.0	148.8	171.9	172.4
2663	47.7	55.0	41.2	48.1	74.7	60.7	73.0	53.3
2664	49.2	28.4	42.1	48.4	27.8	*	*	*
2665	27.5	30.9	32.4	21.2	32.4	*	*	*
2666	22.9	24.9	33.0	50.5	22.1	29.6	32.9	30.3
2670	24.5	23.5	23.5	34.0	40.3	23.2	28.6	33.0
2681	35.4	24.8	29.0	30.8	25.5	29.4	33.7	35.3
2682	36.7	33.0	44.1	40.5	44.0	46.2	46.5	54.9
2710	38.7	32.2	35.3	18.7	16.3	21.8	49.2	38.8
2721	23.1	23.3	34.5	29.4	34.8	30.0	32.6	48.7
2722	33.1	29.8	29.8	39.8	38.3	34.8	46.4	53.2
2731	22.1	22.4	26.7	27.1	28.5	30.1	40.0	*
2732	45.1	37.8	32.3	39.7	24.5	36.5	54.1	*
2733	37.1	26.9	38.9	26.8	26.9	37.7	50.1	53.0
2734	26.3	39.0	27.3	26.6	27.4	34.4	33.2	45.4
2735*****	32.4	22.9	57.1	15.6	19.3	**	**	**
2741	66.2	99.2	117.9	187.3	104.1	72.7	130.0	161.6
2742	39.8	39.8	37.9	41.7	40.5	39.6	44.6	53.2
2743	31.5	24.1	37.0	39.9	31.0	48.6	94.1	76.9
2744	33.1	24.4	43.6	32.4	28.9	39.3	38.0	33.5
2745	45.6	35.4	41.8	45.7	44.6	48.7	52.1	55.9
2751	26.6	24.8	26.7	27.8	28.8	27.4	31.3	32.7
2752	24.2	24.1	27.2	25.6	31.4	35.2	33.2	33.1
2753	23.6	19.9	26.6	25.8	30.9	28.5	28.8	32.2
2754	24.3	24.1	34.3	33.7	25.1	22.9	29.3	34.3
2811	33.5	33.5	30.7	31.8	32.7	35.2	35.7	34.3
2812	30.0	25.1	26.0	30.4	28.3	28.1	34.9	33.6
2821	26.3	27.5	28.0	36.9	32.5	42.9	39.0	41.6
2822	34.9	37.3	31.1	36.5	37.6	35.7	37.3	46.5
2830	38.6	32.8	38.3	39.8	39.4	41.2	48.6	56.3
2840	27.8	27.7	29.0	30.7	28.4	25.3	27.1	29.6
2851	30.0	27.5	24.6	27.7	29.0	29.2	29.6	29.6
2852	28.4	28.7	29.0	27.8	30.3	31.8	33.2	35.9
2861	30.5	29.8	18.1	*	*	*	36.7	78.4
2862	31.2	24.1	31.1	30.1	35.9	32.5	31.6	37.5
2863	20.3	25.0	22.1	*	*	*	30.8	33.2
2871	26.5	29.4	23.5	25.3	27.3	29.7	43.0	31.0
2872	52.4	59.7	60.8	59.9	66.3	55.8	54.2	60.3
2873	26.3	32.9	29.1	28.8	33.3	36.5	41.1	46.4
2874	25.8	25.7	25.4	26.5	26.6	33.7	36.2	28.2
2875	24.6	26.5	26.6	25.4	27.7	29.7	33.1	36.6
2911	53.3	42.2	34.9	41.9	48.8	38.9	57.5	58.6

Table A3
Continued

£ thousand

SIC03	1998	1999	2000	2001	2002	2003	2004	2005
2912	36.8	33.2	38.6	35.0	33.9	38.8	40.4	43.5
2913	34.8	33.7	35.8	36.9	38.8	37.3	39.1	40.3
2914	32.8	29.9	32.9	28.7	32.9	35.4	23.6	32.1
2921	25.3	27.2	33.8	34.1	35.7	40.6	42.4	35.5
2922	30.6	31.8	35.6	29.8	36.6	38.6	39.2	47.4
2923	33.3	30.9	29.4	37.6	38.1	37.5	38.5	43.4
2924	30.2	30.2	30.4	32.1	28.9	36.3	39.1	34.4
2931	49.7	36.0	41.2	51.2	68.1	76.6	*	7.0
2932	23.2	29.1	27.2	25.8	32.3	33.8	*	34.6
2940	32.7	42.6	39.5	30.9	40.9	32.1	34.5	44.0
2951	37.5	25.4	25.8	34.9	29.5	76.7	41.4	42.5
2952	39.8	46.0	33.6	40.9	48.5	58.7	53.0	46.7
2953	29.8	34.2	32.1	30.4	36.0	37.6	39.0	46.3
2954	21.3	20.8	27.7	21.9	31.7	30.4	28.3	38.3
2955	25.3	19.6	38.6	41.5	32.5	26.8	41.6	31.9
2956	35.5	32.3	33.5	30.7	34.6	35.5	39.0	41.1
2960	32.1	32.7	37.9	31.4	42.7	44.6	46.3	57.5
2971	27.0	25.0	30.0	28.8	35.8	38.3	42.7	30.9
2972	24.1	28.4	28.4	22.0	27.6	27.4	33.8	34.3
3001	20.2	18.3	30.6	27.1	31.5	45.6	49.3	40.9
3002	62.5	43.4	41.3	37.7	70.3	67.7	82.1	47.0
3110	24.3	29.9	31.4	28.0	28.4	30.7	34.5	41.8
3120	31.9	32.7	31.6	33.9	34.4	34.8	39.0	39.1
3130	26.6	26.2	29.5	30.4	25.7	34.9	42.1	35.2
3140	28.1	26.4	29.5	23.2	25.6	27.7	27.3	34.9
3150	22.1	26.4	28.3	26.6	29.1	29.0	27.9	39.1
3161	19.3	29.8	32.5	25.8	28.0	30.2	28.5	27.6
3162	28.4	30.6	33.4	33.9	30.8	32.7	38.3	38.3
3210	36.5	38.6	44.7	34.5	39.5	39.0	40.2	44.8
3220	63.2	69.3	65.5	10.0	27.2	38.5	41.8	37.1
3230	25.8	26.0	34.4	32.8	40.9	34.1	43.8	34.0
3310	31.2	36.1	37.3	34.2	41.5	37.2	41.2	43.7
3320	33.0	33.0	38.8	40.3	43.8	50.5	54.7	56.6
3330	39.4	39.3	38.0	28.6	40.1	37.2	45.9	61.5
3340	30.4	32.9	25.7	36.1	24.4	30.2	37.7	39.1
3350	20.9	23.4	28.7	23.6	29.7	34.4	37.4	38.3
3410	44.2	38.3	31.9	46.6	44.8	44.9	56.5	49.9
3420	26.1	26.2	26.0	26.4	29.8	30.7	33.4	36.5
3430	32.7	30.9	29.9	31.8	32.6	32.0	34.3	38.3
3511	34.2	51.5	30.6	28.0	29.1	33.8	37.4	31.2
3512	21.4	22.8	23.4	38.5	25.9	26.9	32.8	27.9
3520	*	46.0	37.0	34.0	36.9	32.5	28.7	50.6
3530	53.4	61.9	56.6	62.1	69.9	61.2	63.9	69.6
3541	22.0	21.7	35.1	51.1	73.5	63.1	44.6	41.9
3542	16.7	26.1	37.8	26.8	17.9	19.5	22.2	22.6
3543	34.6	22.4	43.3	39.6	30.4	31.1	32.4	33.3
3550	31.0	19.5	21.2	20.7	20.7	32.0	35.3	26.7
3611	23.3	26.4	23.2	24.9	26.9	24.3	27.1	32.0
3612	31.9	28.9	30.4	32.0	28.4	30.0	34.5	39.3
3613	32.0	31.2	31.3	29.6	27.9	29.3	32.3	38.9
3614	22.5	22.8	20.3	24.1	25.6	26.7	24.8	27.1
3615	24.6	24.6	23.1	25.7	24.1	24.6	25.0	24.5
3621	66.5	40.0	31.3	29.4	*	*	*	*
3622	27.8	33.4	36.4	39.6	*	*	*	*
3630	16.2	21.1	25.9	34.5	25.0	28.1	32.5	26.4

Table A3
Continued

£ thousand

SIC03	1998	1999	2000	2001	2002	2003	2004	2005
3640	26.0	27.4	32.1	34.2	35.1	32.3	32.1	48.5
3650	29.9	27.6	33.6	29.9	31.5	31.3	39.5	37.5
3661	23.4	33.2	40.0	33.1	27.0	49.3	35.8	23.2
3662	19.3	26.4	30.3	29.8	22.2	27.4	32.3	32.1
3663	22.4	23.9	23.0	25.4	26.3	25.0	30.1	28.4
3710	39.4	36.7	38.7	33.3	48.5	50.8	92.5	61.9
3720	19.1	23.3	20.9	31.8	23.9	25.6	34.0	36.6
Electricity, gas and water supply								
SIC03	1998	1999	2000	2001	2002	2003	2004	2005
4100	94.6	91.8	78.4	94.4	129.5	104.7	117.2	154.1
Construction								
4511	32.0	34.1	39.9	39.2	44.3	36.2	39.0	36.6
4512	67.6	50.4	25.0	43.8	25.0	27.6	26.9	28.0
4521	28.6	32.1	34.0	40.5	42.3	48.5	51.4	54.3
4522	23.1	26.4	29.4	30.1	33.2	34.7	35.0	40.5
4523	26.6	28.2	26.6	34.0	34.6	34.0	40.2	45.3
4524	42.2	25.6	36.9	17.5	33.9	80.6	59.0	54.3
4525	22.8	32.7	35.3	34.0	37.4	30.0	34.4	47.0
4531	27.3	27.5	29.4	31.9	34.4	35.6	37.1	39.4
4532	31.9	29.1	28.2	30.3	31.2	38.4	37.3	36.7
4533	28.5	25.5	26.8	29.9	31.9	34.5	34.6	32.4
4534	19.8	21.6	29.3	32.8	27.5	36.1	28.4	43.7
4541	30.9	30.7	25.4	32.9	32.5	34.6	51.1	48.8
4542	27.3	26.5	32.2	35.2	28.4	37.4	32.6	39.3
4543	27.8	27.9	35.0	37.2	42.0	39.6	32.4	34.2
4544	18.8	22.8	26.1	26.0	26.8	28.0	27.6	32.4
4545	25.5	31.4	24.9	34.3	21.9	31.4	37.6	35.9
4550	29.8	36.0	31.5	39.6	40.3	34.7	49.6	49.2
Distribution								
5010	34.9	37.7	35.8	43.5	47.6	51.3	51.1	46.0
5020	22.4	25.3	24.2	24.6	25.8	25.9	24.6	26.9
5030	24.5	24.2	23.6	25.2	30.3	30.9	36.1	27.0
5040	33.3	20.1	36.1	29.2	30.9	32.9	30.9	19.7
5050	17.0	18.5	22.8	28.3	23.8	31.2	39.5	33.4
5110	40.0	40.4	36.8	45.0	40.9	49.3	67.3	48.7
5120	24.8	31.2	23.8	31.4	25.3	32.3	29.4	33.7
5131	32.7	23.0	22.6	31.8	42.8	33.0	36.7	37.6
5132	22.4	29.4	25.6	28.3	29.0	27.2	34.9	35.1
5133	33.4	29.2	31.7	28.8	34.7	27.0	43.4	55.3
5134	50.0	46.5	46.0	61.8	63.7	49.7	54.5	50.7
5135-37	6.6	117.3	36.4	81.6	50.7	19.3	45.2	66.6
5138	26.8	33.3	23.9	21.5	28.2	27.8	39.5	39.2
5139	16.5	23.1	20.0	26.2	25.2	33.2	32.2	25.8
5141	40.0	35.3	36.4	41.1	40.0	39.3	36.1	35.7
5142	37.0	38.0	35.7	40.9	40.7	53.1	52.3	45.9
5143	62.0	53.0	53.5	54.9	53.3	54.9	60.0	42.4
5144	33.7	37.7	33.6	27.7	31.1	26.1	29.5	35.4
5145	28.9	23.5	35.0	33.9	31.7	35.0	36.3	38.4
5146	44.5	63.9	60.8	63.2	66.3	80.7	71.0	78.2
5147	32.4	38.3	36.0	31.3	37.0	35.1	37.2	37.6
5151	69.4	107.4	72.4	94.1	126.8	212.3	276.4	254.7
5152	30.4	39.2	32.0	35.8	43.0	40.8	54.8	60.2
5153	29.8	27.7	28.1	34.7	29.6	38.0	38.6	37.9
5154	30.3	30.5	28.5	29.1	31.2	32.3	35.8	37.7

Table A3
Continued

£ thousand

SIC03	1998	1999	2000	2001	2002	2003	2004	2005
5155	58.0	65.6	50.1	55.3	39.8	46.8	52.2	61.4
5156	44.4	44.0	45.8	38.2	32.5	40.5	38.1	85.7
5157	31.1	31.4	28.0	36.3	36.4	44.3	53.9	69.6
5164*****	57.0	49.0	61.9	66.9	58.2	**	**	**
5170*****	33.0	28.3	32.2	40.8	29.4	**	**	**
5181***	44.3	37.8	30.6	43.3	30.7	29.1	37.6	40.6
5182***	44.1	35.4	41.4	46.8	42.2	47.6	53.9	56.9
5183***	37.2	27.9	40.4	49.8	30.6	34.1	42.5	39.5
5184****	**	**	**	**	**	52.0	56.6	55.5
5185****	**	**	**	**	**	42.9	53.4	41.2
5186****	**	**	**	**	**	48.7	45.1	49.6
5187***	51.1	47.6	47.0	50.8	45.7	46.2	43.4	55.3
5188***	23.9	24.9	26.0	30.3	37.6	36.5	44.5	45.7
5190****	**	**	**	**	**	35.2	42.9	45.9
5211	16.2	17.3	16.9	14.6	14.4	14.6	14.9	15.9
5212	15.5	14.3	15.4	17.0	19.7	20.9	19.9	21.8
5221	8.9	10.8	10.2	12.5	12.6	12.5	14.8	14.6
5222	13.0	14.6	13.8	13.3	17.5	16.1	17.1	19.6
5223	14.2	12.1	13.9	15.7	15.2	17.4	13.6	19.0
5224	9.6	12.5	11.2	12.3	12.5	11.8	13.4	14.2
5225	7.0	6.0	7.7	7.2	8.7	8.2	9.0	8.8
5226	6.4	7.8	8.3	9.9	7.3	9.0	11.2	12.4
5227	11.3	14.3	13.8	15.3	15.3	14.8	15.3	16.6
5231	15.7	15.4	16.4	18.5	21.4	20.1	23.6	27.1
5232	13.4	8.6	29.5	28.2	30.1	33.7	38.4	27.4
5233	10.5	15.2	12.1	12.1	15.7	15.6	19.1	15.6
5241	12.0	14.5	15.9	15.0	15.3	15.3	16.6	14.5
5242	12.6	18.7	17.6	19.1	19.2	20.4	20.8	22.5
5243	10.5	10.3	11.9	13.1	14.5	15.8	16.3	18.0
5244	19.1	21.2	23.1	24.0	23.8	25.1	26.8	23.1
5245	18.6	16.1	18.9	22.5	22.6	20.6	25.3	23.2
5246	17.5	22.3	20.9	20.7	21.8	21.7	23.9	22.2
5247	10.5	11.0	12.3	13.9	14.8	14.7	15.2	14.6
5248	13.9	16.5	17.3	19.0	19.2	21.8	22.1	21.3
5250	20.1	20.2	23.1	27.4	23.9	21.8	31.4	32.7
5261	26.4	23.3	15.9	19.4	24.1	23.6	28.9	31.5
5262	8.6	9.5	8.5	8.9	6.7	9.5	9.6	15.9
5263	18.1	16.9	24.9	22.5	22.7	21.6	23.2	30.8
5270	13.9	19.2	19.6	17.3	17.0	18.1	21.2	22.5
Hotels and catering								
5510	15.9	18.1	18.6	19.2	18.7	18.6	20.5	19.9
5521	13.2	12.6	17.9	13.9	13.4	14.0	14.2	14.2
5522	36.5	18.7	32.7	34.6	32.2	34.4	38.7	42.1
5523	15.7	14.4	18.8	17.1	20.9	19.4	20.5	23.3
5530	9.8	10.4	11.6	11.9	12.0	11.8	12.5	12.7
5540	10.3	10.4	10.5	11.6	12.7	12.9	14.7	13.8
5551	8.1	*	9.8	11.7	13.7	16.5	7.6	19.8
5552	9.6	9.8	10.3	10.1	13.1	11.6	13.8	14.7
Transport, storage and communication								
SIC03	1998	1999	2000	2001	2002	2003	2004	2005
6010	32.9	39.2	47.2	50.8	60.0	42.2	36.0	*
6021	27.9	25.7	24.6	22.6	22.7	25.5	25.2	25.9
6022	18.0	17.6	17.0	14.1	18.2	18.1	18.0	18.0
6023	16.8	18.5	18.4	14.7	18.6	20.2	20.6	26.8
6024	25.3	27.7	29.1	29.2	29.8	29.7	28.3	32.3

Table A3
Continued

£ thousand

SIC03	1998	1999	2000	2001	2002	2003	2004	2005
6110	74.0	71.7	84.8	93.7	115.1	94.1	117.9	127.3
6120	16.3	18.2	34.5	28.1	32.9	27.0	37.3	26.6
6311	27.6	35.9	37.8	37.4	41.8	48.0	46.4	55.5
6312	29.7	31.5	29.7	29.9	30.2	34.3	35.0	38.6
6321	88.7	92.6	67.6	81.8	69.5	52.1	85.1	65.0
6322	53.3	65.4	53.0	53.2	66.4	71.5	63.7	68.9
6323	95.6	85.9	83.8	92.7	84.6	86.4	91.4	94.8
6330	25.6	25.0	24.3	27.2	29.6	37.1	31.4	38.8
6340	39.6	43.7	45.2	37.1	37.0	38.9	43.1	52.8
6412	30.0	27.4	*	*	*	*	*	*
6420	84.9	82.4	83.7	73.2	80.9	97.2	111.1	115.7
Renting and business activities								
7110	104.5	106.1	79.6	116.6	104.9	107.0	109.0	112.4
7122	19.9	48.0	40.8	18.0	13.2	14.6	23.4	16.5
7131	58.1	53.7	25.8	26.6	35.4	49.0	40.2	53.4
7132	41.5	41.6	42.3	44.0	49.0	48.9	48.9	56.6
7133	202.8	67.8	151.1	189.5	101.3	69.8	100.8	113.1
7134	52.8	53.9	49.8	54.6	59.2	57.3	55.3	51.4
7140	24.7	26.8	26.1	31.7	35.6	30.3	30.4	32.5
7210	43.0	31.2	28.4	40.6	26.7	47.0	66.7	52.9
7220	52.4	49.0	50.6	49.7	53.7	54.5	57.6	67.9
7221****	**	**	**	**	**	58.6	57.7	48.9
7222****	**	**	**	**	**	54.3	57.6	68.5
72.3/72.4	55.4	65.8	55.2	54.6	54.4	51.1	56.3	51.2
7250	26.9	35.9	36.0	44.5	39.9	38.2	41.5	44.1
7260	28.6	36.0	29.2	36.4	44.4	43.3	51.3	51.8
7411	36.0	37.9	43.5	45.7	45.9	47.0	49.6	54.6
7412	38.6	38.4	39.3	44.3	44.9	45.7	44.6	47.9
7413	19.6	25.0	25.6	23.6	24.6	22.9	31.5	25.6
7414	49.5	49.1	53.8	46.2	42.3	47.1	46.6	52.9
7415	69.1	29.0	37.8	51.0	43.2	15.1	18.3	4.5
7420	39.5	37.9	40.6	41.7	38.3	46.4	45.8	50.5
7430	29.5	29.7	30.1	28.7	31.7	44.3	45.2	39.7
7440	39.2	61.3	62.6	53.8	56.4	60.7	53.9	73.3
7450	17.6	19.4	22.2	20.1	21.7	22.2	24.1	24.9
7460	14.1	15.6	17.2	17.4	20.0	19.7	20.8	23.7
7470	6.0	6.5	6.8	7.8	8.5	9.5	9.7	9.8
7481	19.6	23.1	27.9	21.9	22.3	24.8	31.6	32.2
7482	20.8	22.1	20.1	25.8	29.7	23.9	36.3	32.5
7485***	23.8	29.1	22.1	27.5	25.6	29.3	37.5	34.5
7486****	**	**	**	**	**	21.5	16.4	18.0
7487***	35.7	37.3	42.7	37.3	35.2	36.9	42.0	42.3
Other services								
9000	66.0	74.7	62.8	56.2	82.1	76.3	75.4	89.9
9001****	**	**	**	**	**	182.8	165.7	200.8
9002****	**	**	**	**	**	37.7	41.3	49.0
9003****	**	**	**	**	**	48.7	39.9	46.6
9111	30.0	26.6	27.1	26.6	33.6	25.1	35.1	31.5
9112	25.0	21.9	21.4	17.5	19.9	23.7	26.4	36.5
9120	32.0	32.0	28.9	30.6	38.2	28.2	33.0	36.8
9131	-1.4	-4.7	-4.4	-6.5	-7.6	-4.1	-6.0	-6.3
9132	2.7	*	-3.2	-2.8	-1.4	-1.3	-1.0	-4.6
9133	10.1	11.3	8.9	8.8	8.3	8.0	9.5	9.9

Table A3
Continued

£ thousand

SIC03	1998	1999	2000	2001	2002	2003	2004	2005
9211	28.9	56.9	50.5	28.0	25.8	48.4	36.0	40.4
9212	108.0	75.9	106.4	169.4	123.9	143.6	126.2	172.4
9213	18.8	17.2	21.6	20.3	28.4	34.6	29.7	29.7
9220	65.6	66.2	78.7	88.6	90.5	81.6	96.1	108.5
9231	33.9	34.8	32.7	32.7	35.2	38.8	41.0	34.8
9232	19.9	17.4	15.9	12.6	16.4	21.1	21.0	24.5
9233	29.6	24.7	32.1	35.1	41.3	42.0	38.1	40.8
9234	37.1	25.3	21.4	31.4	48.5	24.6	31.1	26.7
9240	61.3	66.8	73.3	103.3	*	44.8	54.9	77.9
9253	10.7	14.1	5.8	8.5	8.4	8.0	9.6	8.9
9261	11.1	8.7	9.8	10.1	9.8	11.5	11.4	12.4
9262	13.9	17.3	16.8	18.9	20.4	22.7	20.6	23.5
9271	24.1	30.1	29.8	26.5	34.4	30.5	36.4	40.4
9272	11.3	11.5	10.6	14.0	13.1	13.5	14.4	14.4
9301	14.9	15.8	20.2	18.2	19.6	17.6	15.9	17.6
9302	10.2	11.4	12.7	13.9	12.3	11.7	13.9	13.7
9303	19.6	24.7	22.5	30.8	28.5	29.9	32.7	28.0
9304	18.7	17.8	24.8	25.1	20.2	22.6	16.4	18.6
9305	20.5	23.9	24.9	27.4	24.7	29.7	33.0	37.9

Notes:
* Information suppressed to avoid disclosure or because employment estimate is less than 500.
** Not available.
*** Change of industry classification from SIC92 to SIC03 - pre-2003 data have been assigned to the new classification.
SIC 5161 to 5181
SIC 5162 to 5182
SIC 5163 to 5183
SIC 5165 to 5187
SIC 5166 to 5188
SIC 7483 to 7485
SIC 7484 to 7487
**** New SIC from 2003.
***** SIC discontinued from 2003.