MANUFACTURING AND MARKET SERVICES IN TYNE & WEAR, 1998-2000

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PREFACE

This report covers about three-fifths of the economy in Tyne & Wear, that is all of manufacturing (worth £2.5bn) and the market services sector (worth £5.2bn).

It gives unprecedented insight into the market services sector. It is a major advance to have such data on the services sector, which has come about through the introduction of the Annual Business Inquiry (ABI) from 1998. Previous reports by TWRI have covered only manufacturing because the then Census of Production was restricted to that sector.

The data set for this report (the "county tables") has been specially acquired by TWRI from ONS.

Caution has to be attached to the reliability of the **figures at county-level.** For example, the productivity of market services seems unlikely to have risen by the reported 19% in two years. In particular, the construction dataset seems to omit a large amount of output in 2000, depressing and compromising the productivity and profitability data as well. The major oddities are highlighted in the text. Readers may find more.

Nevertheless this report gives great insight into the performance of the manufacturing and market service sectors in Tyne & Wear, compared both through time and with the UK. The manufacturing series goes back over two decades.

In addition the report analyses purchasing of services by both the manufacturing and market services sectors. This gives clear indications of the potential linkages between these industries and services.

MAIN POINTS – MANUFACTURING INDUSTRIES

In 2000, in current prices, manufacturing output in Tyne & Wear was worth in excess of £2,500m, estimated operating profit just under £960m, and productivity (output per employee) just over £34,500. (§2.1, §4.1, §5.1)

In real terms (i.e. after adjusting for inflation) between 1998 and 2000 Manufacturing:

- Output (Gross Value Added) in Tyne & Wear fell 6%; in the UK it fell 2.2%. Despite a rise in output in some manufacturing industries in Tyne & Wear, most notably Other Non-Metals, (up 49% over the two year period), there were falls in most industries. Electrical & Optical's output fell 23%, and Chemicals and Other Manufacturing were both down 18%. (§2.1)
- Employment levels also fell in Tyne & Wear by 8.5%. In the UK they fell by 6.2%. (§3)
- Productivity rose 2.5% in Tyne & Wear and 4.2% in the UK. (§4.2)
- Estimated Operating Profits fell 5% in Tyne & Wear, compared to a 1% fall in the UK. (§5.1)
- Estimated Operating Profit Margins rose by 2 percentage points to 38% in Tyne & Wear, whilst remaining the same at 42% in the UK. (§5.2)

Between 1998 and 2000, manufacturing investment in Tyne & Wear fell by 53%, from the high level of £568m in 1998 to £265m in 2000 (at constant 1995 prices). This was largely due to the Electrical & Optical industry, whose investment fell 81% (down from £209m in 1998, which was 37% of total net investment in that year). In the UK, it fell by 18% over the same period. In 2000, investment per employee was 7% lower in Tyne & Wear than the UK average. (§6)

Productivity rose 2.5% in Tyne & Wear manufacturing industries between 1998 and 2000. Huge gains occurred in Machinery & Equipment (up 64.1%) and Other Non-Metals (up 53%). In 2000 productivity was 10% lower in Tyne & Wear than the UK. (§4.2) Manufacturing productivity was broadly flat in the 1990s after huge rises in the 1980s.

Establishment size in Tyne & Wear (31.5 employees) was more than 50% larger than in the UK in 2000. The only industry to have a smaller average establishment size was Food & Drink (nearly a quarter less). (§7)

The Transport Equipment industry (i.e. motor and shipbuilding) held overwhelmingly the largest share of output (23% of the total) (in current prices) up 3 percentage points since 1997. Transport Equipment's share of output in Tyne & Wear in 2000 was also more than twice as large as its UK average share. Despite this, its output fell by 5.5% between 1998 and 2000 (in real terms). In terms of productivity, Transport & Equipment did, however, outperform the UK (by a huge 35.6%) and also the North East (by 13.8%) in 2000 (in current prices). (§2.2, §4.2)

At the other end of the scale, Chemicals, Other Non-Metals and Other Manufacture each held just 4% of total output. The Chemicals industry was noticeably weak in comparison to its UK counterpart, which held a 9% share. It also underperformed both the UK and the North East in terms of productivity by more than 40% in 2000. (§2.2, §4.2)

Operating Profit Margins in Tyne & Wear in 2000 were lower than the UK's in all but 2 of the top 10 manufacturing industries; Transport Equipment (14 percentage points higher) and Other Non-Metals (7 percentage points higher). (§5.2)

Net investment per employee in 2000 was, overall, lower in Tyne & Wear than the North East (by nearly 6%) and the UK (by nearly 7%). In the Electrical & Optical industry, however, Tyne & Wear's net investment per employee was more than 2.5 times bigger than in the North East, although still lower than in the UK. (§6)

Of the four major services, 55% of spending by the manufacturing industries was on Road Transport Services (£120.1m). (§8)

MAIN POINTS – MARKET SERVICES

The service sector in this report excludes public services (public administration and large parts of health and education). We thus call it the 'market services sector'. It also excludes financial services, for technical reasons (covered separately in §16).

In 2000, in current prices, market service industry output was worth in excess of £5.2bn. Estimated operating profit was worth just under £1,850m and productivity (output per employee) just under £22,000. (§9, §11, §12.1)

In real terms (i.e after adjusting for inflation) between 1998 and 2000 Market Services:

- Output rose by 3.5% overall, compared to a much higher 10% rise in the UK. The Tyne & Wear rise was supported particularly by an 18% rise in Post & Telecommunications (to £387m) [probably led by mobile phone operations]and a 25% rise in Transport Support Services[1](to £163m). (§9)
- Employment fell by 14% in Tyne & Wear, despite a rise of 5% in the top 10 service industries. The UK also suffered a fall of 8%. (§10) [These are very odd results].
- Productivity rose by 19% in Tyne & Wear and the UK. (§11)
- Estimated Operating Profits fell 16% in Tyne & Wear, and rose over 6% in the UK. (§12.1)
- Estimated Operating Profit Margins fell 4 percentage points (to 36%) in Tyne & Wear, and 2 percentage points (to 43%) in the UK. (§12.2)

Between 1998 and 2000, investment among service industries rose by 9% (from £950m in 1998). In 2000, investment per employee was 7% higher in Tyne & Wear than the UK. (§13)

Productivity grew by 19% in Tyne & Wear. Major gains were witnessed in Transport Support (+42%) and Real Estate services (+33%). (§11.1)

Establishment size in Tyne & Wear was nearly 50% larger in Tyne & Wear than the UK. Between 1998 and 2000, establishment size fell from an average of 14 employees per business to 12. (§14)

Other Business Services was the largest industry in terms of output (£1,144m); 22% of the sector total. This was lower than its UK counterpart (23.8%), which was by far the largest share of output of all UK market services. (§9)

Productivity in Other Business Services in Tyne & Wear (£29,287) was, however, 13% lower than in the UK, and far lower than other market services with much smaller outputs; e.g Computers (£44,072) and Post & Telecommunications (£44,051). (§11)

Land Transport had the smallest output share (3.1%). This was smaller than its UK counterpart's share of 4.1%. (§9) [This may reflect low public transport revenues. It also includes haulage].

The services industries' purchasing of the four key services, Road Transport, Telecoms, Computer Services and Advertising totalled £618m in 2000. Over half of this (52%) was on Advertising (§15).

[1] *Transport Support here is shorthand for 'Support and Auxiliary Transport Activities, Activities of Travel Agents'. This may include expansion by the Port of Tyne and Travel Agency call centres (such as My Travel) etc.*

MAIN POINTS – FINANCIAL INTERMEDIATION

This section attempts to estimate similar indicators for the financial service industry (essentially banking, building societies and insurance etc.) The ABI county tables do not give any data on financial services, so the following are estimates by TWRI.

Caution: There are many issues surrounding this data. The caution note in §10 should be referred to for details. No allowance has been made for deducting the FISIM[2] variable, normally present in ONS estimates of GVA by industry. (Appendix 13 explains FISIM).

Output in current prices was £511m in Tyne & Wear in 2000. Productivity was slightly lower in Tyne & Wear (£41,965) than in the UK (£42,488). (§16.1, §16.2)

In real terms (i.e after adjusting for inflation) between 1998 and 2000:

- Output rose by just 0.2% in Tyne & Wear to £449m (in 1995 prices). In the UK it fell by 3.2%. (§16.1)
- Employment rose 2% to 12,200, compared to a 3% rise in the UK. (§16.2)
- Productivity rose 1.3% compared to a 5.6% fall in the UK. (§16.3)

MAIN POINTS – CONSTRUCTION

The construction industry in Tyne & Wear had an extremely weak period between 1998 and 2000 compared to its UK counterpart. The 2000 data are so low as to be incredible in TWRI's view.

In 1995 prices, between 1998 and 2000, output fell a huge 30% in Tyne & Wear. It grew 13% in the UK. (§17.1) Despite this, employment fell only 1.4% in Tyne & Wear, compared with a 1.8% rise in the UK. As a result of the large fall in output combined with a much smaller fall in employment, productivity declined by 32% in Tyne & Wear. In the UK it rose by 11% (§17.2).

Estimated operating profit in Tyne & Wear fell 47% (in 1995 prices), whilst it grew 18% in the UK. (§17.3) Estimated operating profit margins fell 9 pp in Tyne & Wear, compared with a 3 pp rise in the UK. (§17.4)

In 2000, in current prices the output of Tyne & Wear's construction industry was £496m. There were 22,700 people employed in the industry and productivity (output per employee) was £21,867. (§17.1, §17.2, §17.3)

Net investment was £2,119 per employee. (§17.5)

The average establishment size in Tyne & Wear was 11 employees. This was nearly twice as large as the UK average of 6. (§17.6)

[2] *FISIM means Financial Intermediation Services Indirectly Measured. It attempts to capture revenues which do not count as Value Added.*

1 INTRODUCTION

This paper presents information on the characteristics and performance of the manufacturing, services and construction industries in Tyne & Wear between 1998 and 2000 (the latest available in 2003) as recorded by the Annual Business Inquiry (ABI). The analysis covers the output, productivity, operating profit, net investment, establishment size and purchasing of services of firms in the county.

The main focus of this paper is on levels in 2000, with levels in 1998 and 1999 being used as a frame of reference. Comparisons are drawn between Tyne & Wear and the North East and UK.

There are seven earlier reports in this series produced by TWRI, covering the period since 1979, but for manufacturing industries only.

This is the first report to cover also market services and the construction industry. There is also a separate section on Financial Intermediation which has not been covered before. TWRI has had to make its own estimates for this service, using ONS data for larger geographical areas and known employment in Tyne & Wear.

The last report covered the period from 1993 to 1997 as reported by the Census of Production. The ABI replaced the Census of Production. The ABI was first conducted for 1998[3].

By special purchase, the ABI provides data at district-level. This is by industry (SIC92) class. It provides a valuable source of information on manufacturing and services in Tyne & Wear with:

- financial data which give an insight into the output, productivity and profitability patterns which lie behind employment changes;
- amount spent on services by the manufacturing sector which shows their potential demand to the services sector;
- investment data which may suggest the likely direction of industrial change in the future;
- a time-series which allows an insight into the dynamics of change

This is the fourth report to analyse change using Standard Industrial Classification 92 (SIC 92). The Standard Industrial Classification (SIC) was revised in 1992, with SIC92 replacing SIC80. The 1993 Census of Production was the first analysed by TWRI to use SIC92. The new frame allocates manufacturing industries into 14 subsections, instead of 17 (SIC80) classes.[4]

The report covers the top 10 divisions of market services, plus construction. Re-coded tables of data prior to 1991 are not available at county level.

To trace changes in real terms, the financial data presented in this paper have, where appropriate, been adjusted to constant 1995 prices. As ONS no longer publish price deflators for each variable provided by the census, the GVA deflator has been used to adjust data to constant 1995 prices. [5]

[3] *The ABI also replaces several other annual survey systems, including; Annual Employment Survey (AES), Annual Service Trades Inquiry and Annual Retail Inquiry.*

[4] *Mechanical Engineering is now part of Machinery & Equipment. Electrical Engineering was subsumed into a new Electrical & Optical category. The Motor Industry was amalgamated with Other Transport Equipment (shipbuilding) into a new Transport Equipment sub-section.*

[5] *The deflator used was GVA at basic prices', which has the Treasury code CGBV.*

MANUFACTURING INDUSTRIES

2 MANUFACTURING OUTPUT

2.1 STRUCTURE OF OUTPUT

In 2000 the value of the output of Tyne & Wear's manufacturing industries was £2,538m (at current prices).[6] The top ten industries accounted for 96% of this output (see Table 1 below). The analysis focuses on these industries.

Table 1: Output (GVA) of Top Ten Manufacturing Industries in Tyne & Wear, with UK Comparison. (In Current Prices).

SIC (92)	1998 Rank	Industry	Output (Gross Value Added) Tyne & Wear (£m)	Tyne & Wear (% of total output)	UK (% of total output)	Output Location Quotient
DM	1	Transport Equipment	576	23%	11%	2.02
DL	2	Electrical & Optical	349	14%	14%	0.98
DK	6	Machinery & Equipment	334	13%	8%	1.68
DJ	5	Basic Metals	265	10%	11%	0.94
DA	3	Food & Drink	239	9%	13%	0.72
DE	4	Paper, Printing	233	9%	12%	0.74
DH	7	Rubber & Plastics	131	5%	5%	1.04
DG	8	Chemicals	114	4%	9%	0.48
DI	11	Other Non-Metals	104	4%	3%	1.21
DN	9	Other Manufacturing	103	4%	4%	0.96
		Total *	**2,448**	**96%**	**92%**	**1.04**
		All Manufacturing	**2,538**			

** Totals may not sum due to rounding*

The Transport Equipment industry continued to hold the largest share of total manufacturing output in 2000, at 23%, £576m. This was up slightly from its share of 22% in 1999, but matches its share in 1998. Expansion at the Nissan plant in Sunderland may have contributed to this growth. In 2000, it was agreed that the new Nissan *Micra* would be produced in Sunderland, creating 800 jobs. Swan Hunter is also likely to have been a large factor. In 2000, they won a £25m contract with Kerr McGee to build an FPSO (floating production, storage and offloading) vessel, creating more than 800 jobs.

In 2000, the once traditional 'core' of manufacturing in Tyne & Wear (Electrical & Optical and Machinery & Equipment) had a combined share of total manufacturing output of 27% (£683m). This is an increase from 22% in 1997 and almost back to the 28% share in 1996. This is high relative to the UK (22%) and the North East (16%).

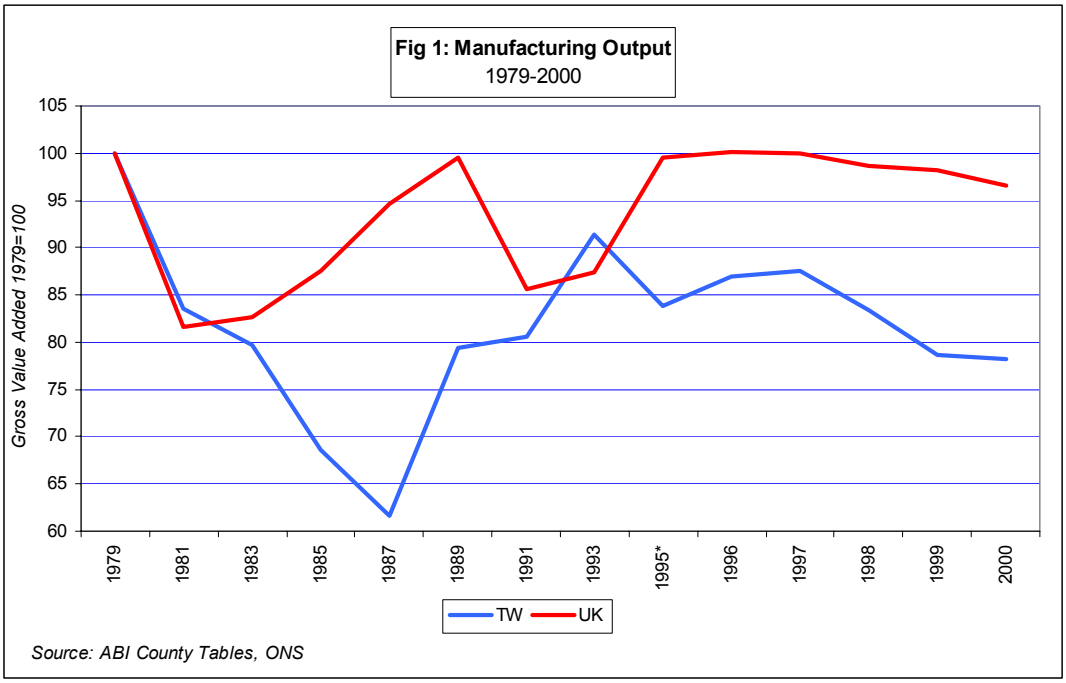
The output share of each industry in Tyne & Wear can be compared to the corresponding industry in the UK by using the 'output location quotient'. This divides the local share of manufacturing output by the corresponding UK share to give a measure of the industry locally, relative to its size in the national economy in 2000 (Table 1). The Transport Equipment industry (2.02) was significantly over-represented in Tyne & Wear, holding over twice the UK average share of manufacturing output, emphasising the importance of firms like Nissan and Swan Hunter to both the industry and manufacturing in general within Tyne & Wear.

[6] *This is about one fifth of GDP.*

Machinery & Equipment (1.68) and Other Non-Metals (1.21) were also over-represented with Rubber & Plastics slightly over-represented at 1.04. Three of the top ten manufacturing industries were very slightly under-represented, with Food & Drink (0.72) and Paper & Printing (0.74) even more so.

The most under-represented industry, Chemicals, had been over-represented in 1993 (1.29) before falling in 1995 (0.94). It has continued to do so and in 2000, its share of manufacturing output was less than half the UK's share (0.48). It is not clear why this continuing decline has taken place. It is likely that the decline in a particular industry (e.g. paints) is a major contributor. Chemicals had very high output figures before 1993 but they have been gradually decreasing since. The Chemicals industry includes firms ranging from Chi-Rex and Sanofi-Sythalabo to Rohm & Haas.

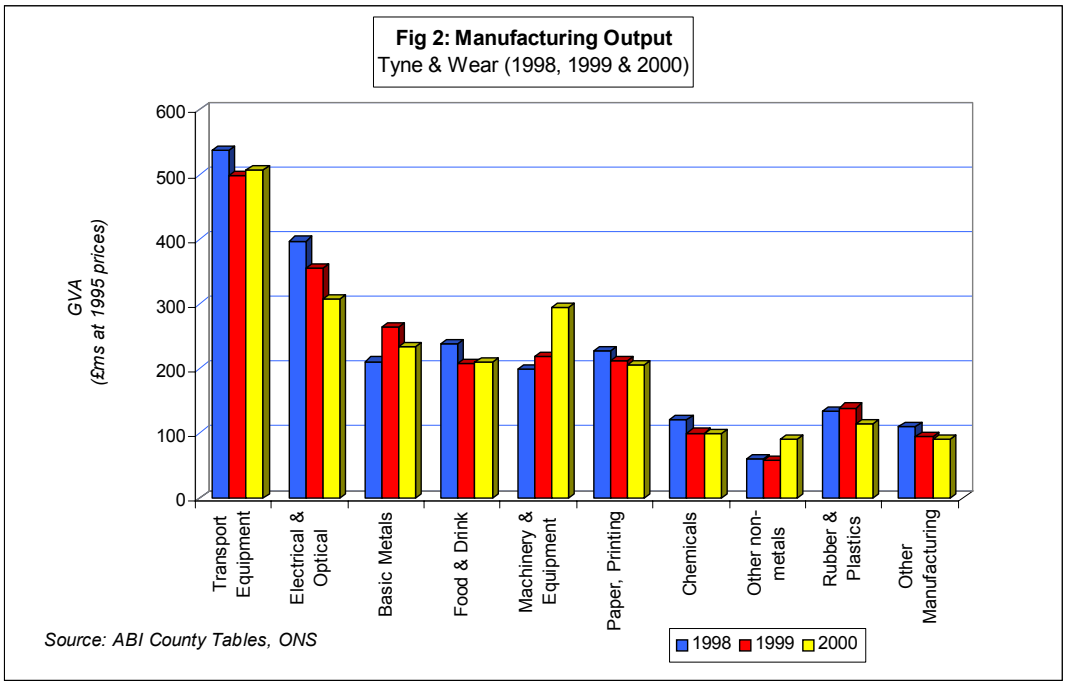
2.2 CHANGE IN OUTPUT, 1979-2000



Caution: Last six years at annual intervals, instead of bi-ennial.

Manufacturing output in Tyne & Wear fell hugely between 1979 and 1987 (by over 38%), followed by a sharp rise to 1989 (up 29%). It continued to rise until 1993 when output was 91% of the 1979 level (in real terms) (See Fig 1). Since 1993 output has remained below this level, with some fluctuation.

In the most recent year, 1999/00, Tyne & Wear's manufacturing output dropped by just 0.6% to £2,234m (1995 prices) after a fall of 5.6% over the year 1998/99 (1995 prices). In the UK manufacturing output fell just 2.2% over the two year period to £131,327m (1995 prices). Other Non-Metals output and Machinery & Equipment output both rose sharply in 1999/00, by 55%, (to £92m) and 35% (to £294m) respectively. The output of Rubber & Plastics fell by 18% (to £115m) over this year. Other noticeable falls were in Electrical & Optical (-14%, to £307m) and Basic Metals (-11%, to £234m). The other top ten industries remained fairly stable (Fig 2).



The clothing industry has dropped out of the top 10 manufacturing industries in Tyne & Wear for the first time in at least 20 years. In the period 1993-96 clothing output increased by 24% to £134m (in 1995 prices). It then fell by nearly 13% in 1997 and has continued to do so to 2000. In 2000 clothing output had fallen to just £53m (in 1995 prices). This is a fall of over 60% in 4 years. The main reason for the fall over this period is clearly the closure of many clothing factories in Tyne & Wear. The major factories that closed or massively reduced production over the period from 1998-2000 include Courtaulds Leisurewear in Newcastle and Courtaulds Textiles, Wallsend. (Table 2) Also, Textillion in North Shields and Killingworth lost many jobs over this period.

Table 2: Job Losses Within Clothing Industries in Tyne & Wear, 1998-2000

Year*	Company	Location	No. of Job Losses
1998	Claremont Garments	South Tyneside	261
1998	Courtaulds Leisurewear	Newcastle	145
1998	Textilion	Killingworth, North Tyneside	100
1998	Textilion	North Shields, North Tyneside	230
1999	Berghaus	Sunderland	50
1999	JPS	Washington, Sunderland	200
1999	William Sugden	Sunderland	35
1999	Courtaulds Textiles	North Tyneside	214
1999	Courtaulds Textiles	Sunderland	220
1999	Jockey UK	Gateshead	50
1999	Sizecheck Ltd	Newcastle	55
2000	Berghaus	Washington, Sunderland	150
2001*	William Baird	Sunderland	268
TOTAL			**1,978**

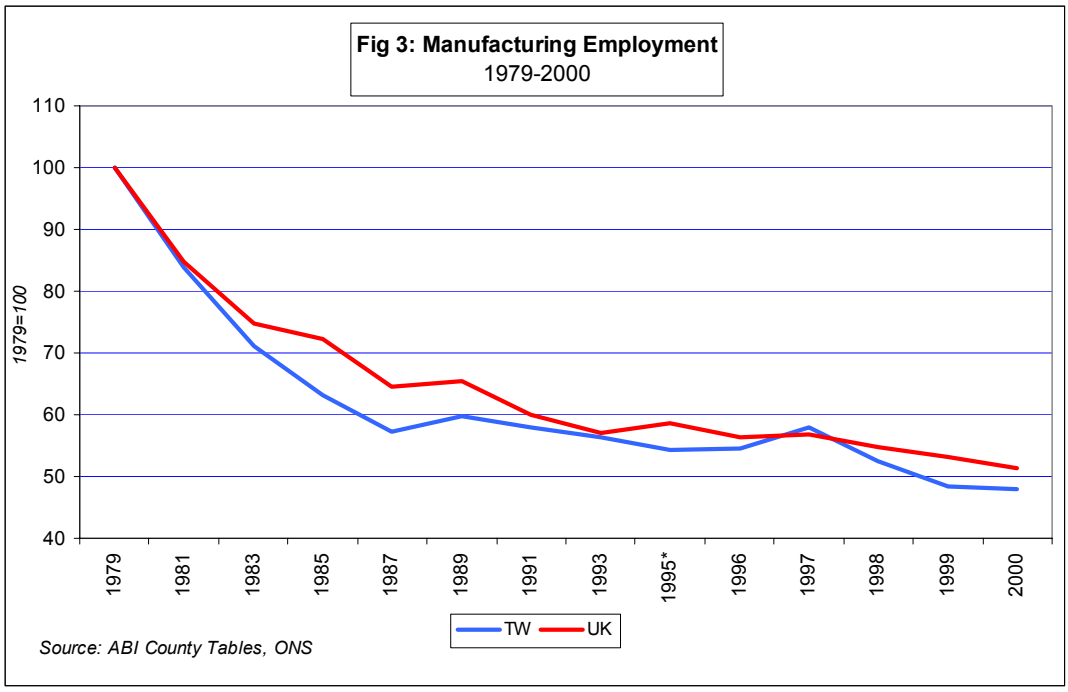
*Note: * the year dates given are when they were reported in TWRI's quarterly Economic Review. Whilst there is one in 2001, the actual job losses took place in 2000. All job losses in table occurred between 1998 and 2000.*

Source: Job Change database, TWRI. The data from the database is originally gained from the press (mainly the Journal)

A total of 1,978 jobs were reported in the Job Change database as having been lost between the start of 1998 and the end of 2000, in the Clothing industries.

3 MANUFACTURING EMPLOYMENT

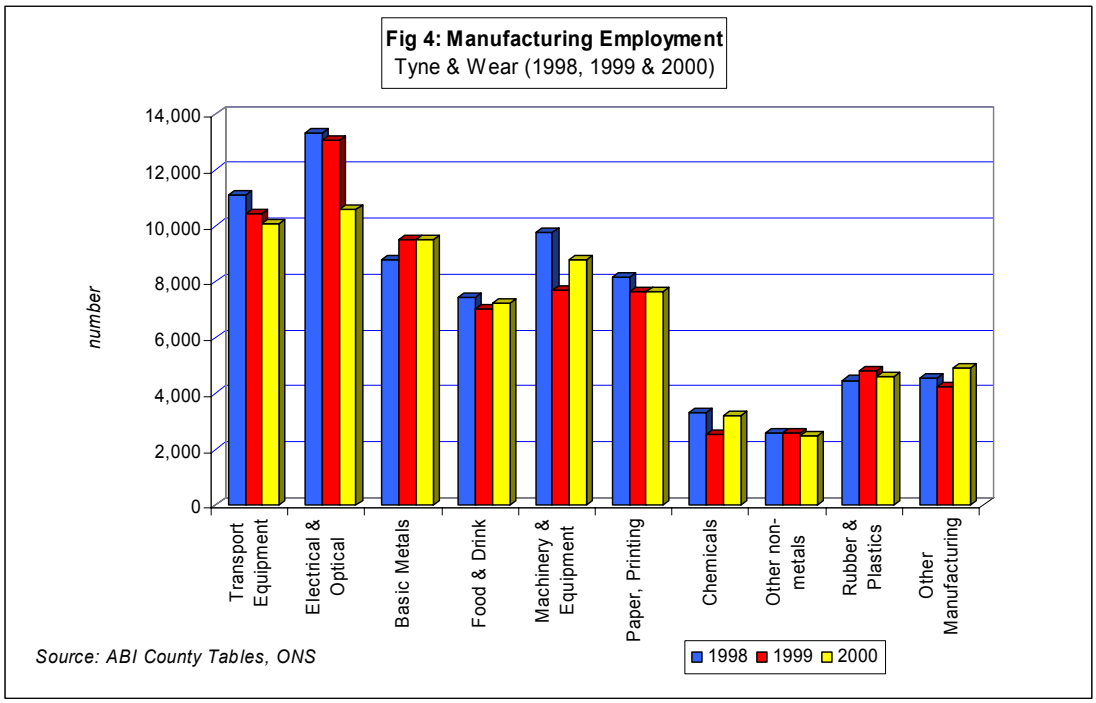
Between 1979 and 2000, manufacturing employment roughly halved both in Tyne & Wear and the UK (see figure 3). In Tyne & Wear, overall employment in manufacturing more than halved over this period. The most dramatic fall was between 1979 and 1987 (down nearly 43%), with a modest but nearly constant decline to 2000 when employment was only 48% of its level in 1979 (at 73,500 people). There was a rise of 3.6% between 1995 and 1997 in Tyne & Wear whilst UK employment fell by 1.7% over the same period. Between 1997 and 2000, there was a sharp decline in Tyne & Wear of around 10%, twice the UK rate of decline (around 5%).



*Caution: The last six years are at annual intervals, instead of bi-ennial

In 2000, employment was highest in the Electrical & Optical (10,600) and Transport Equipment (10,100) industries in Tyne & Wear (Fig. 4). Employment levels were also relatively high in Basic Metals (9,500) and Machinery & Equipment (8,800).

Between 1998 and 2000, employment levels fell by 8.5% in Tyne & Wear, compared with a 6.2% fall in the UK. A notable rise in employment was recorded in Basic Metals (+700, +7.8%). The only other rises over this period were very modest and were recorded in Other Manufacturing (+400, +7.9%) and Rubber & Plastics (+100, +2.4%). Significant falls were recorded in Electrical & Optical (-2,700, -20.6%), Transport Equipment (-1,000, -9.3%) and Machinery & Equipment (-1,000, -10.1%).



The big fall in Electrical & Optical employment reflects the closure of the Siemens microchip plant in North Tyneside in 1998 and the job losses at Siemens Microelectronics in Newcastle in 1999. The Siemens microchip plant was acquired by Atmel and re-opened in January 2001.[7]

[7] *Job Change Database, TWRI*

4 MANUFACTURING PRODUCTIVITY

4.1 PRODUCTIVITY LEVELS

In 2000 manufacturing productivity in Tyne & Wear at £34,555 was around 10% below the UK and 5% below the North East (Table 3). This is similar to the position in relation to the UK in 1997, after deterioration from 1993 where productivity was 8% above the UK average. In 1997 Tyne & Wear productivity was 10% below that of the North East. Since then it has become closer to North East levels but fallen relative to the UK.

Productivity levels are a measure of efficiency in the use of labour. They provide a guide towards future output and employment performance. In this report Productivity is defined as 'Gross Value Added per Employee'.

Table 3: Productivity Levels in Major Tyne & Wear Manufacturing Industries, with NE and UK comparison, 2000

SIC (92)	Industry	Tyne & Wear (Current Prices)	Index of North East (NE=100)	Index of UK (UK=100)
DM	Transport Equipment	57,214	113.8	135.6
DL	Electrical & Optical	32,983	108.3	76.4
DK	Machinery & Equipment	38,090	114.8	114.6
DJ	Basic Metals	27,971	100.2	85.0
DA	Food & Drink	33,032	*	83.8
DE	Paper, Printing	30,548	69.7	74.8
DH	Rubber & Plastics	28,601	99.4	89.2
DG	Chemicals	35,501	58.2	59.2
DI	Other Non-Metals	41,574	107.8	110.7
DN	Other Manufacturing	20,981	92.8	71.7
	All Manufacturing	**34,555**	**94.2**	**90.1**

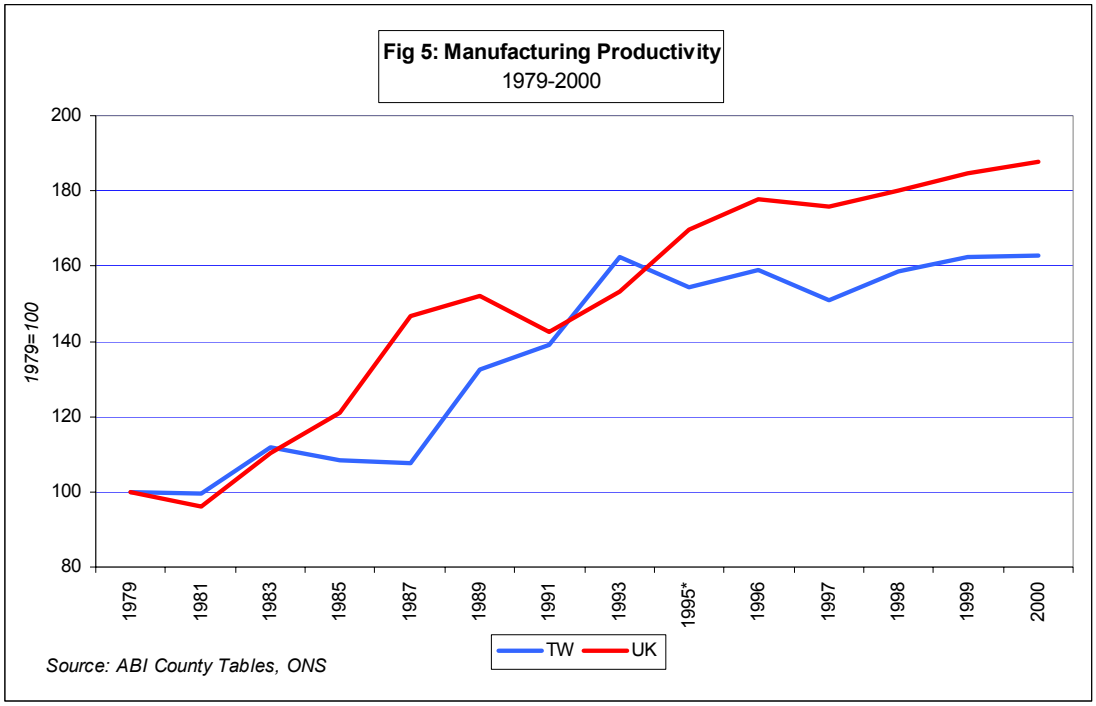
The productivity level achieved by Transport Equipment (£57,214), the largest industry in Tyne & Wear by output, was the highest of the manufacturing industries. It also exceeded the North East's productivity from this industry by 14% and the UK by a massive 36%. Nissan's Sunderland-based plant will have played a big part in this. The second largest manufacturing industry 'Electrical & Optical' achieved a greater productivity level (£32,983) than the North East average (by 8%) but only three-quarters of the UK average.

Machinery & Equipment and Other Non-Metals were the only two major industries to achieve levels of productivity greater than both the North East and UK averages (at £38,090 and £41,574 respectively). Chemicals' performance was the poorest with productivity (£35,501) over 40% less than both the North East and the UK. (This may be due to the absence of high value patented pharmaceuticals).

4.2 PRODUCTIVITY GROWTH 1979-2000

Between 1979 and 2000 there was strong growth in manufacturing productivity in both Tyne & Wear and the UK (Fig. 5). The overall rise was 63% in Tyne & Wear and a massive 88% in the UK. Between 1979 and 1983 productivity levels were similar in Tyne & Wear and the UK. Following this period, UK levels grew at a faster rate than in Tyne & Wear before dropping in 1991 back to levels similar to Tyne & Wear. Since 1993 productivity levels in the UK have been consistently higher than

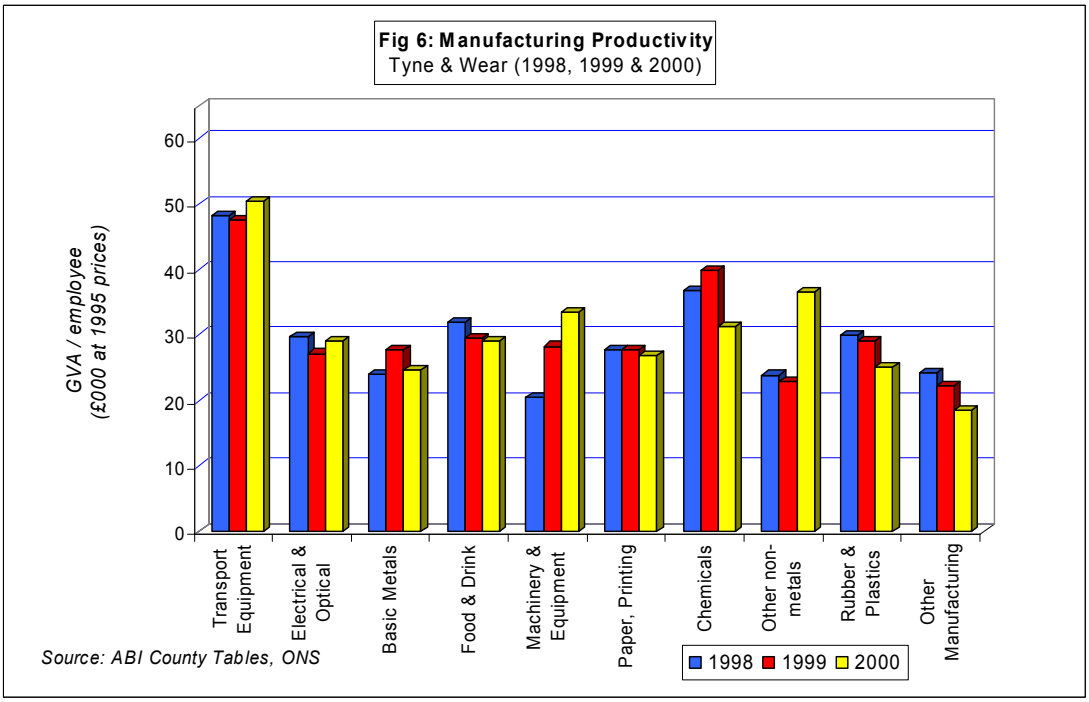
in Tyne & Wear. The productivity levels in 1993 and 2000 in Tyne & Wear were almost the same, whilst productivity levels in the UK increased by over 34% over this period (in real terms).



*Caution: The last six years are at annual intervals, instead of bi-ennial

Productivity in Tyne & Wear's manufacturing industry rose 2.5% overall, compared with a 4.2% rise in the UK. It rose sharply between 1998 and 2000 in the Machinery & Equipment (+64%, to £33,530) and Other Non-Metals (+53%, to £36,597) (1995 prices) industries. Other smaller increases were achieved in the Transport Equipment (+4%, to £50,364) industry which saw a slight fall in 1999 and Basic Metals (2.5%, to £24,623) (1995 prices) which also saw a 15% rise in 1999.

Productivity fell by 24% in 'Other' manufacturing industries between 1998 and 2000, down to £18,469 (1995 prices). This will largely be due to the fall in output (-18%), along with an 8% rise in employment. Other large falls in productivity were experienced in the Rubber & Plastics (-16%, to £25,177) and Chemical (-15%, to £31,251) industries.



5 MANUFACTURING OPERATING PROFIT

One measure of profitability is operating profitability: the reward to capital from value added. An indication of operating profits can be obtained from the ABI data. Since, in principle, value-added is split between labour and capital and rewards to labour are known, the rewards to capital can be calculated. In the past, total labour costs have been estimated by TWRI as 20% higher than Wages & Salaries. ABI now produce 'Total Labour Costs' data and so operating profit can be calculated directly by subtracting the 'Total Labour Costs' from the 'Gross Value Added'.

Operating Profit provides a good guide to financial health. It is not affected by differences in capital structure of a company (debt, equity or share, capital). It is a wider concept than pre-tax profit. To obtain pre-tax profit interest payments and depreciation would have to be subtracted.

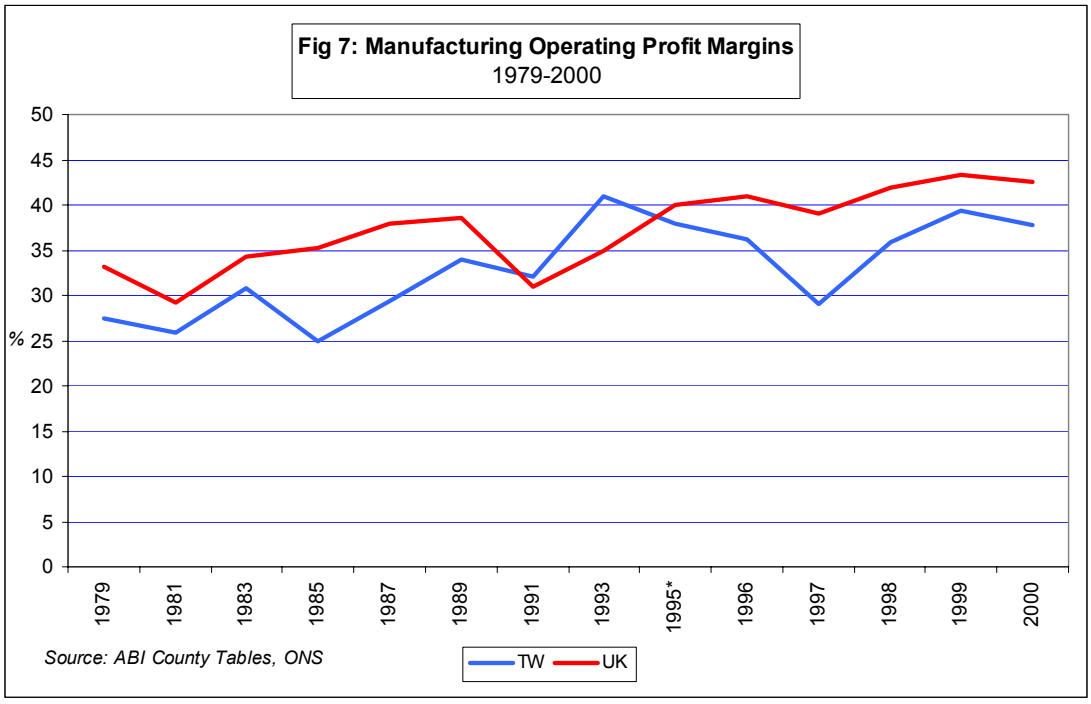
Here, operating profits are considered in terms of both levels and, particularly margins. In a healthy economy, in the long-run, profit levels will grow as output grows. However, profits tend to be sharply cyclical – falling and rising in particular years within the business cycle.

5.1 OPERATING PROFIT LEVELS

In 2000 manufacturing operating profits in Tyne & Wear were £957m in current prices. Between 1998 and 2000, real operating profits fell by 1.5% overall to £843m (in 1995 prices), although there was a rise of 3.6% in 1999 to £887m. This follows a similar trend to the UK where operating profits have also remained very stable. In 1998 manufacturing operating profits in the UK were £56bn (in 1995 prices), increasing to £58bn in 1999 and falling back to £56bn in 2000, an overall fall of 1%.

5.2 OPERATING PROFIT MARGINS

Between 1979 and 2000, manufacturing operating profit margins in Tyne & Wear rose substantially, by 10 percentage points to 38%. Over the same period, profit margins in the UK rose 9 percentage points to 42% (Fig. 7).



*Caution: The last six years are shown in annual intervals, instead of bi-ennial.

The Tyne & Wear Profit Margin was only above the UK's in 1991 and 1993. Between these years the Tyne & Wear profit margins increased sharply, by 9 percentage points to 41%. This was 6 percentage points above the UK. In 1997 levels dropped to 29%, 10 percentage points below the UK. (39%). In 1999, Tyne & Wear levels reached 39%, the highest since its peak in 1993 and just 4 percentage points below the UK.

In 2000, profit margins averaged 38% in Tyne & Wear, a recovery of 9 percentage points since 1997 (Table 4). Profit margins in Tyne & Wear are still below the UK and the North East (both average 42%) but have edged closer than the 10 percentage point difference in 1997. Two of the major Tyne & Wear industries had higher profit margins than the UK in 2000; Transport Equipment (50%; UK 37%) and Other Non-Metals (51%; UK 44%).

High profit margins can occur for contrasting reasons: Transport Equipment has the highest output level and one of the highest profit margins at 50%. This is probably due to the high capital-intensity of Nissan.'Other Non-Metals' has the highest profit margin among the major industries at 51%.

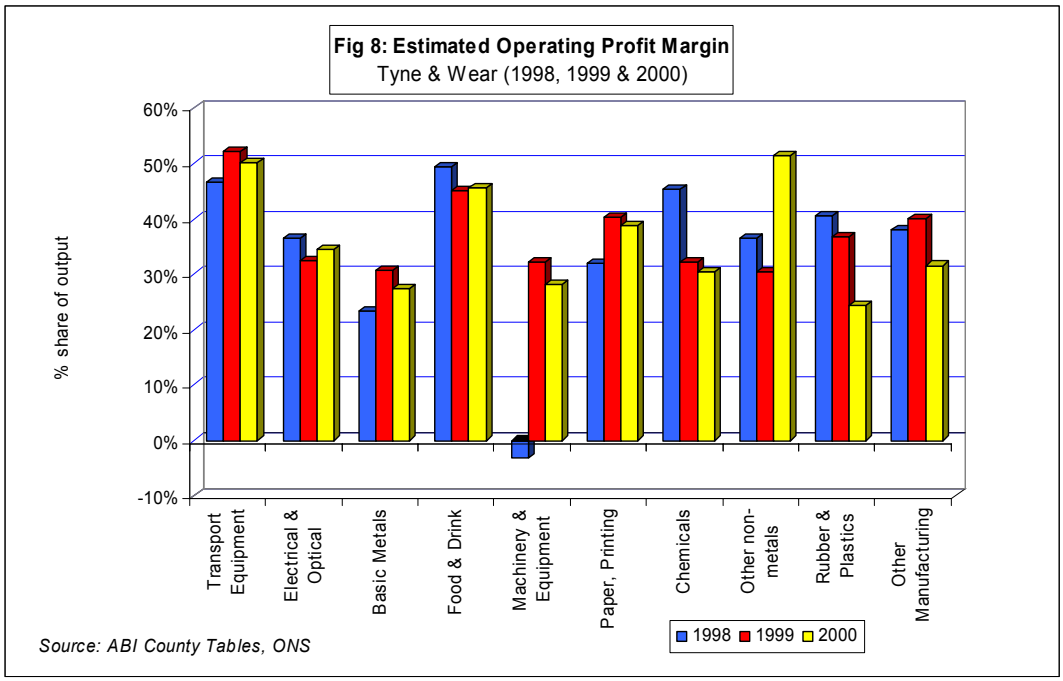
The main manufacturing industries with the biggest gaps in terms of profit margins were Chemicals, Rubber & Plastics and Electrical & Optical. The Chemical industry in Tyne & Wear had significantly smaller profit margins than the North East and the UK (20 percentage points lower than both). This probably reflects its lack of patented pharmaceuticals. Profit margins in the Electrical & Optical industry were also 10 percentage points lower than in the UK, although 2 percentage points greater than in the North East. In the Rubber & Plastics industry, profit margins were 12 pp lower than in the UK and 7 pp lower than the North East. In addition, Tyne & Wear under-performed in comparison with the North East in the Paper & Printing industry where profit margins were 18 percentage points lower (and 6 percentage points below the UK).

Table 4: Operating Profit Margin, Manufacturing Industries, 2000

		Profit Margin			
SIC (92)	**Industry**	**Tyne & Wear**	**North East**	**UK**	**Difference TW-UK**
DM	Transport Equipment	50%	46%	37%	14
DL	Electrical & Optical	35%	33%	45%	-10
DK	Machinery & Equipment	28%	29%	31%	-3
DJ	Basic Metals	27%	22%	35%	-7
DA	Food & Drink	46%	*	52%	-6
DE	Paper, Printing	39%	57%	45%	-6
DH	Rubber & Plastics	24%	31%	36%	-12
DG	Chemicals	30%	50%	50%	-20
DI	Other Non-Metals	51%	49%	44%	7
DN	Other Manufacturing	32%	33%	41%	-9
	All Manufacturing	**38%**	**42%**	**42%**	-5

Note: Difference TW-UK may not sum due to rounding.

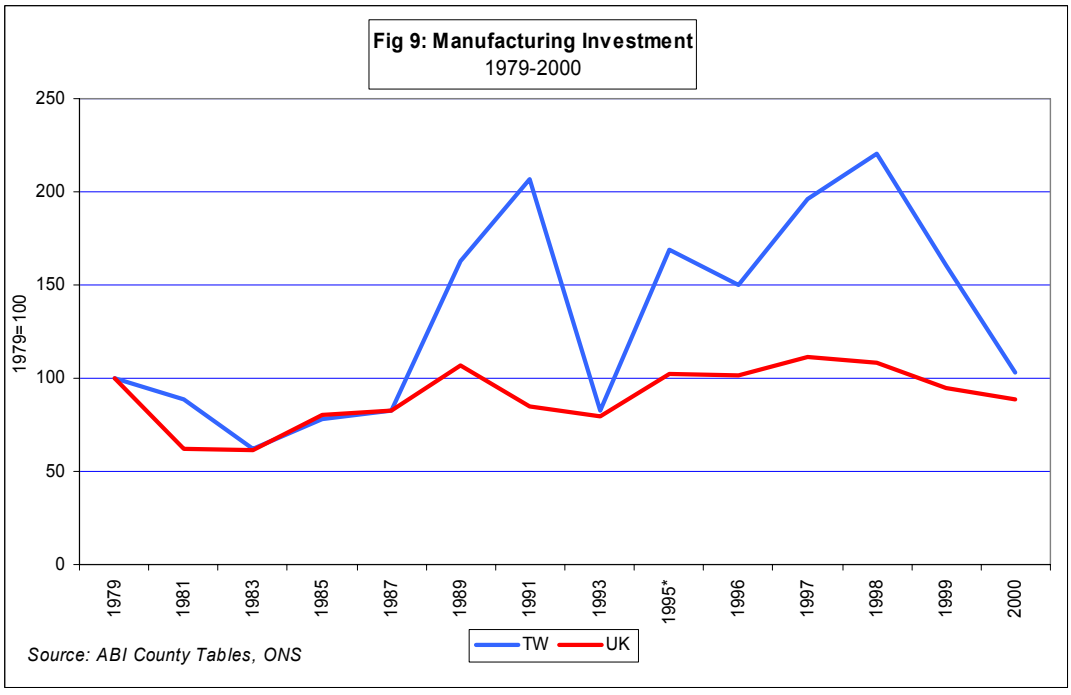
Between 1998 and 2000 margins declined in four of the top ten industries. The greatest falls were in Rubber & Plastics (down 16 percentage points) and Chemicals (down 15 percentage points) (Fig.8). Other falls were in Other Manufacturing, Food & Drink and Electrical & Optical.



The greatest rise in margins was in the Machinery & Equipment industry (up 31 percentage points). In 1998 there was an overall loss in this industry of 3%, it then recovered to a profit margin of 32% in 1999 with a fall to 28% in 2000. There was also a rise in Other Non-Metals, up nearly 15 percentage points between 1998 and 2000. The rest of the top ten industries in Tyne & Wear rose by less than 7 percentage points over the 2 year period.

6 MANUFACTURING INVESTMENT

Manufacturing investment in Tyne & Wear has fluctuated sharply. After 1987 the figures include leased assets. Up until 1987 investment was fairly stable with a sharp rise until 1991 and then a sharp

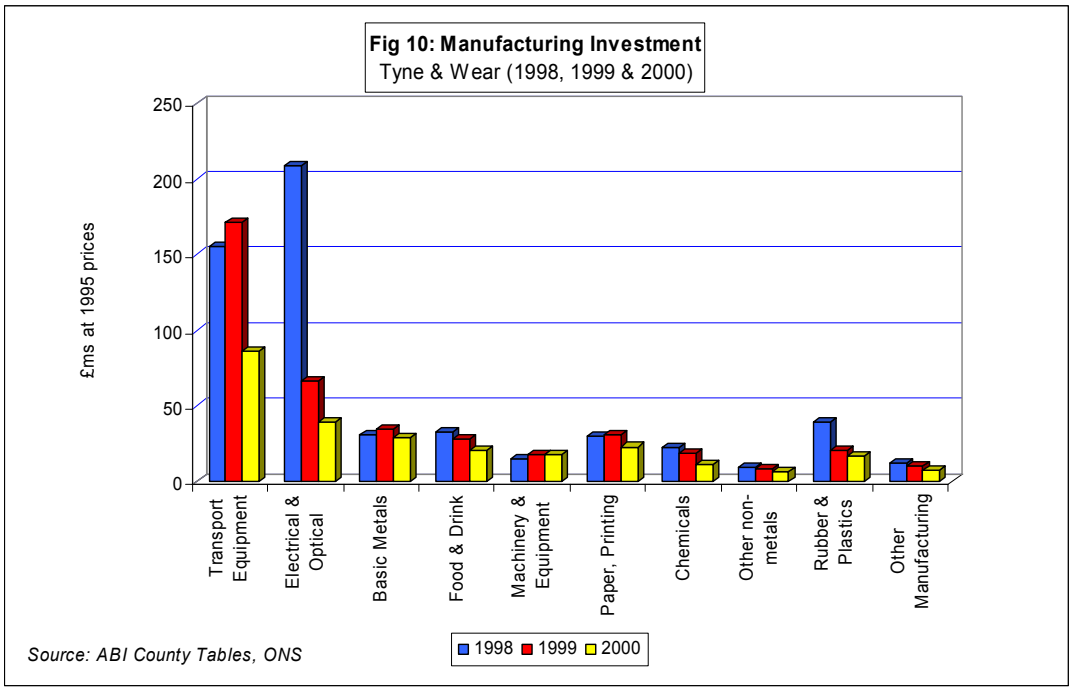


Caution: The last six years are at annual intervals, instead of bi-ennial.

fall in 1993 (Fig. 9) [in 1993 the European economy was in recession – Ed]. Levels rose after 1993 with another sharp fall between 1998 and 2000. In 2000 investment levels in Tyne & Wear (at £265m) were only 3 percentage points above the 1979 level (1995 prices). UK manufacturing investment fell by about two-fifths after 1979. It has been on a growing trend since 1983, but with drops of about a quarter after 1989 and about a tenth since 1998.

Between 1998 and 2000 manufacturing investment in Tyne & Wear slumped by 53%, from around £568m to £265m (at 1995 prices). Investment tends to be sharply cyclical. Although this is a large fall, manufacturing investment has not yet fallen back to its 1993 low level of just under £212m (at 1995 prices). The big fall in manufacturing investment in Tyne & Wear may well be linked to the much lower levels of Foreign Direct Investment (FDI) in recent years. Net investment in the UK over this period (at 1995 prices) also fell, but to a lesser extent than in Tyne & Wear; down 18% from £18,366m in 1998 to £15,003m in 2000.

Between 1998 and 2000, investment dropped, in real terms, in 9 of the 10 major industries in Tyne & Wear. In the Machinery & Equipment industry, investment rose 21% from £15m to £18m (in 1995 prices) (Fig. 10). The biggest fall, in percentage and monetary terms was in the Electrical & Optical industry, where investment crashed from £209m in 1998 to £39m in 2000 (in 1995 prices), a fall of 81%. This follows a) the closure of Siemens' microchip factory, b) retrenchment by Philips c) closure of ONWA (TVs) and d) the closure of Lucas SEI. Of the Electrical & Optical industries, the largest fall was in 'manufacturing of radio, tv, communications' where investment fell from £189m in 1998 to £28m in 2000 (in 1995 prices). Other declines ranged from a 57% fall in investment in the Chemical Industry to a 7% fall in the Basic Metals Industry.



The definition of investment is wide. In the ABI investment is called 'net capital expenditure' which includes expenditure on plant & machinery and on buildings and vehicles. It is net of the disposal of these assets, but no reduction is made for depreciation.

Investment gives a strong indication of the direction in which manufacturing is developing. It is both a physical and psychological sign of where growth is to be expected (by management). In practice, investment tends to follow previous profitability - as the major source of investment capital is retained profit. Firms new to the area, cannot be financing their investments from retained profits from operations in that area. Therefore it can be dangerous to try and draw conclusions from investment

data and patterns. Single years do not give a firm basis and sampling from the ABI can distort investment figures. Readers interested in investment should refer back to earlier papers since 1979.

In 2000 the Transport Equipment industry had the highest level of investment (£86m at 1995 prices) accounting for 32% of all manufacturing investment in Tyne & Wear (Table 5). The Electrical & Optical industry accounted for the second highest share (15%). At £39m (1995 prices) this was a massive drop (81%) from its net investment of £209m in 1998. Basic Metals and Paper, Printing also held a reasonably high share of total investment, at 11% and 8.7% respectively.

Table 5: Net Investment Levels, Manufacturing Industries, 1998-2000

SIC (92)	Industry	Net Investment (at 1995 prices)		
		1998	1999	2000
DM	Transport Equipment	£155m	£171m	£86m
DL	Electrical & Optical	£209m	£66m	£39m
DK	Machinery & Equipment	£15m	£18m	£18m
DJ	Basic Metals	£31m	£35m	£29m
DA	Food & Drink	£33m	£28m	£21m
DE	Paper, Printing	£30m	£31m	£23m
DH	Rubber & Plastics	£40m	£20m	£17m
DG	Chemicals	£23m	£19m	£11m
DI	Other Non-Metals	£9m	£8m	£7m
DN	Other Manufacturing	£13m	£10m	£7m
	All Manufacturing	**£568m**	**£414m**	**£265m**

Net investment per employee in Tyne & Wear in 2000 was £4,100 (at current prices) (Table 6). This was 6% below the North East average (£4,300) and 7% below the UK (£4,400). In 1997, investment per employee in Tyne & Wear had been almost 1% above the North East and a very substantial 30% above the UK.

Table 6: Net Investment per Employee in Manufacturing Industries with UK Comparison, 2000

SIC (92)	Industry	Tyne & Wear (at current prices, £)	TW/NE NE=100	TW/UK UK=100
DM	Transport Equipment	9,748	134.3	150.1
DL	Electrical & Optical	4,232	268.8	92.6
DK	Machinery & Equipment	2,356	92.8	92.4
DJ	Basic Metals	3,457	116.9	124.5
DA	Food & Drink	3,312	*	75.4
DE	Paper, Printing	3,435	100.1	89.4
DH	Rubber & Plastics	4,268	115.0	111.4
DG	Chemicals	4,045	31.9	37.3
DI	Other Non-Metals	3,219	93.8	69.5
DN	Other manufacturing	1,674	82.0	65.7
	All Manufacturing	4,091	94.2	93.3

** North East data was suppressed for this industry*

7 MANUFACTURING ESTABLISHMENT SIZE

In 2000 the average manufacturing establishment in Tyne & Wear had 32 employees. This was over 50% greater than the UK average of 21 (Table 7). Tyne & Wear size as a proportion of the UK average (TW/UK) fell to 1.52 in 2000, after an increase to 1.58 in 1997. It had remained relatively steady for the 3 years before this. However, establishment size in Tyne & Wear has fallen since 1997 (from 40 in 1997, 34 in 1998 to less than 32 in 1999 and 2000). Over this same period the average UK establishment size, after a fall between 1997 and 1998 (from 25 employees to 21), has remained steady at between 21 and 22 employees per establishment.

Table 7: Establishment Size* in Manufacturing Industries with UK Comparison, 2000

SIC (92)	Industry	Tyne & Wear (per business)	UK (per business)	TW/UK
DM	Transport Equipment	127.4	60.1	2.12
DL	Electrical & Optical	44.5	26.7	1.67
DK	Machinery & Equipment	43.7	22.8	1.92
DJ	Basic Metals	20.2	14.6	1.38
DA	Food & Drink	34.3	43.8	0.78
DE	Paper, Printing	21.6	12.8	1.69
DH	Rubber & Plastics	38.5	28.3	1.36
DG	Chemicals	48.5	47.2	1.03
DI	Other Non-Metals	23.0	17.9	1.28
DN	Other Manufacturing	18.4	9.8	1.87
	All Manufacturing	**31.5**	**20.6**	**1.52**

** = Employees per business*

In 2000, nine of the top ten industries in Tyne & Wear had an establishment size greater than the UK average. The only industry with establishment size below the UK average was Food & Drink at just over three-quarters of the UK size (0.78).

Large establishment size in Tyne & Wear has been evident since analyses began (1979). Establishment size was over 50% greater than the UK in; Electrical & Optical, Machinery & Equipment, Paper & Printing and Other Manufacturing. Establishment size was over twice that in the UK in the Transport Equipment industry. Establishment size in the Chemicals industry was marginally above that of the UK (1.03).

8 MANUFACTURING PURCHASING OF SERVICES

An overview of purchasing patterns by the major manufacturing industries in Tyne & Wear can be assembled from their expenditure on the four major services. These are Road Transport, Telecommunications, Computer-related services and Advertising. In all cases, these purchases of services relates to purchases from external sources (i.e outside the manufacturing firm).

8.1 PURCHASING OF KEY SERVICES

In 2000, the manufacturing sector in Tyne & Wear purchased Road Transport, Telecommunications, Computer and Advertising services valued at over £217m (equivalent to nearly 2% of GDP in Tyne & Wear). Purchasing of these services came particularly from the Machinery & Equipment Industry (£32.1m); 15% of all spent by the manufacturing sector as a whole. Other major industries with high spends on these services include Transport Equipment, Electrical & Optical, Basic Metals and Food & Drink. Other Manufacturing spent the least on the four major services at just over £9m (Table 8).

Table 8: Purchasing of Key Services by Manufacturing Industries in Tyne & Wear, 2000

		Service Purchases (£m)			
SIC (92)	Industry	**Road Transport**	**Telecoms Services**	**Computer Services**	**Advertising Services**
DM	Transport Equipment	14.0	2.5	9.1	2.4
DL	Electrical & Optical	13.8	3.6	4.3	3.1
DK	Machinery & Equipment	13.8	3.1	5.3	9.9
DJ	Basic Metals	16.7	2.4	2.2	3.7
DA	Food & Drink	14.1	1.1	0.7	11.5
DE	Paper, Printing	11.7	1.6	1.6	2.4
DH	Rubber & Plastics	8.3	1.4	1.1	4.2
DG	Chemicals	7.4	2.0	2.6	6.4
DI	Other Non-Metals	9.9	0.8	0.5	0.9
DN	Other Manufacturing	5.6	0.8	0.6	2.1
	Total	**115.1**	**19.3**	**28.1**	**46.4**
	All Manufacturing	**120.1**	**20.1**	**28.9**	**48.4**

Expenditure on Road Transport Services was the largest services item purchased by the top ten manufacturing industries in Tyne & Wear, over £115m of the £120m spent by 'All Manufacturing' industries (about 1% of GDP).

The Transport Equipment industry spent the most out of the major manufacturing industries on Computer Services, spending 1.7 times (£9.1m) as much on Computer Services as the next highest, Machinery & Equipment (£5.3m).

The Food & Drink industry spent the most on Advertising Services at £11.5m. This includes Nestlé, Findus, Scottish & Newcastle, Greggs and Kingsmill. Machinery & Equipment also spent heavily on Advertising at £9.9m.

Table 9 below compares expenditure on the key services in Tyne & Wear with that in the North East and the UK.

Table 9: Purchases of Key Services by Manufacturing Industries in 2000 in Tyne & Wear with NE and UK Comparisons

SIC (92)	Industry	% of total spent on the 4 major services attributed to each industry		
		TW	NE	UK
DM	Transport Equipment	12.8%	6.9%	9.9%
DL	Electrical & Optical	11.4%	7.7%	7.8%
DK	Machinery & Equipment	14.7%	10.5%	5.0%
DJ	Basic Metals	11.5%	15.5%	8.2%
DA	Food & Drink	12.6%	*	23.2%
DE	Paper, Printing	7.9%	7.2%	14.0%
DH	Rubber & Plastics	6.9%	9.2%	4.4%
DG	Chemicals	8.5%	27.5%	13.0%
DI	Other Non-Metals	5.6%	4.9%	4.4%
DN	Other Manufacturing	4.1%	4.1%	3.9%
	All Manufacturing	**100%**	**100%**	**100%**

** indicates not available due to the suppression of data*

In Tyne & Wear a greater proportion (96.1%) is spent on the major services by the top ten industries than in the UK (93.8%). It is difficult to compare with the North East due (oddly) to the suppression of data for the Food & Drink industry. The proportion spent within each of the top ten industries can be seen in Table 9. Tyne & Wear establishments from the Food & Drink, Paper & Printing and Chemicals industries, purchased a lower proportion of services than the UK. The only industry in Tyne & Wear to account for a lower proportion than both the North East and UK was the Chemicals industry. Chemicals has been a major declining manufacturing industry in Tyne & Wear over recent years.

8.2 PROPORTION OF OUTPUT (GVA) SPENT ON SERVICES

Tyne & Wear and UK manufacturing industries spent larger amounts in relation to their output on Road Transport and Advertising than on the other two key services.

Despite Tyne & Wear's relatively peripheral location in the UK, its manufacturing sector spends relatively little on Road Transport. Overall the Top 10 manufacturing industries in Tyne & Wear spent the equivalent of 4.7% of output on Road Transport, slightly below the UK (5.1%) (Table 10). Other Non-Metals spent by far the largest proportion (9.6%) (This was also true in the UK where Other Non-Metals spent 12.3% of the value of their output on Road Transport. (Bricks, glass etc. is heavy in relation to value and thus expensive to deliver). Transport Equipment in Tyne & Wear spent just 2.4% of the value of their output on this service, (UK, 2.9%). Tyne & Wear's Transport Equipment industry avoids some use of Road Transport in two obvious ways: 1) ships are not delivered by road. 2) The bulk of Nissan's cars (85%+) go for export, direct to the Port of Tyne.

The top 10 manufacturing industries in Tyne & Wear spent the equivalent of 1.9% of output on Advertising (Table 11). This was under half the UK average (4.5%). Transport Equipment spend on Advertising relative to output in Tyne & Wear (0.4%), was only a tenth of the UK average (4.0%). Advertising spend by Paper & Printing (1.0%) was also exceptionally low compared to the UK (5.4%). Chemicals spent the largest proportion on Advertising (5.7%). This was still more than 2 percentage points lower than in the UK.

Table 10: Manufacturing Industries' Expenditure on Road Transport as a Proportion of Output (GVA), 2000

SIC (92)	Industry	Expenditure on Road Transport Services £m	Output (GVA (£m)) in Tyne & Wear	Expenditure on Road Transport Services as Proportion of GVA %	Corresponding UK Proportions %
DM	Transport Equipment	14	576	2.4	2.9
DL	Electrical & Optical	14	349	3.9	2.3
DK	Machinery & Equipment	14	334	4.1	3.2
DJ	Basic Metals	17	265	6.3	5.5
DA	Food & Drink	14	239	5.9	7.8
DE	Paper, Printing	12	233	5.0	5.7
DH	Rubber & Plastics	8	131	6.4	6.4
DG	Chemicals	7	114	6.5	5.9
DI	Other Non-Metals	10	104	9.6	12.3
DN	Other Manufacturing	6	103	5.4	5.3
	Total	**115**	**2,448**	**4.7**	**5.1**
	All Manufacturing	**120**	**2,538**	**4.7**	**not available**

Table 11: Manufacturing Industries' Expenditure on Advertising as a Proportion of Output (GVA), 2000

SIC (92)	Industry	Expenditure on Advertising Services £m	Output (GVA (£m)) in Tyne & Wear	Expenditure on Advertising Services as Proportion of GVA %	Corresponding UK Proportions %
DM	Transport Equipment	2	576	0.4	4
DL	Electrical & Optical	3	349	0.9	1.8
DK	Machinery & Equipment	10	334	3.0	2
DJ	Basic Metals	4	265	1.4	1.6
DA	Food & Drink	11	239	4.8	11.4
DE	Paper, Printing	2	233	1.0	5.4
DH	Rubber & Plastics	4	131	3.2	2.4
DG	Chemicals	6	114	5.7	7.8
DI	Other Non-Metals	1	104	0.9	1.6
DN	Other Manufacturing	2	103	2.0	4
	Total	**46**	**2,448**	**1.9**	**4.5**
	All Manufacturing	**48**	**2,538**	**1.9**	**not available**

THE MARKET SERVICES SECTOR IN TYNE & WEAR

The service sector here excludes public services (public administrations and large parts of health & education)[8]. We thus call it the 'market services sector'. It also excludes financial services, for technical reasons (covered separately in §10).

9 MARKET SERVICES OUTPUT

In 2000, the value of the output of Tyne & Wear's market service sector was £5.2bn (just over two-fifths (45%) of GDP). The top ten market services accounted for over 86% of this output (Table 12). The analysis is focused on these services. Importantly, this analysis excludes the public services which account for around a third of the economy in Tyne & Wear.

Table 12: Largest Market Services in Tyne & Wear Measured by Output, 2000

SIC (92)	1998 Rank	Industry	Output (Gross Value Added)				Output Location Quotient
			Tyne & Wear (£m)	UK (£m)	Tyne & Wear (% of total services output)	UK (% of total services output)	
74	1	Other Business Services	1,144	93,430	22.0%	23.8%	0.92
52	2	Retail	866	48,570	16.6%	12.4%	1.34
51	3	Wholesale	666	52,510	12.8%	13.4%	0.96
64	4	Post & telecommunications	440	25,218	8.4%	6.4%	1.32
55	6	Hotels and restaurants	306	22,104	5.9%	5.6%	1.05
50	5	Motor Trade	265	19,163	5.1%	4.9%	1.04
72	7	Computers	236	23,632	4.5%	6.0%	0.75
70	10	Real Estate	216	14,051 *	4.2%	3.6%	1.16
63	8	Transport support	185	15,916	3.6%	4.1%	0.88
60	9	Land Transport#	159	15,991	3.1%	4.1%	0.75
		Total	**4,482**	**330,586**	**86%**	**84%**	
		All Services	**5,205**	**392,788**	**100%**	**100%**	

** This is an estimate calculated by TWRI.* *#Includes road haulage, buses, taxis, rail and pipelines*

Caution: Market Services in this section excludes Financial Services worth perhaps £500m. (Details in §10).

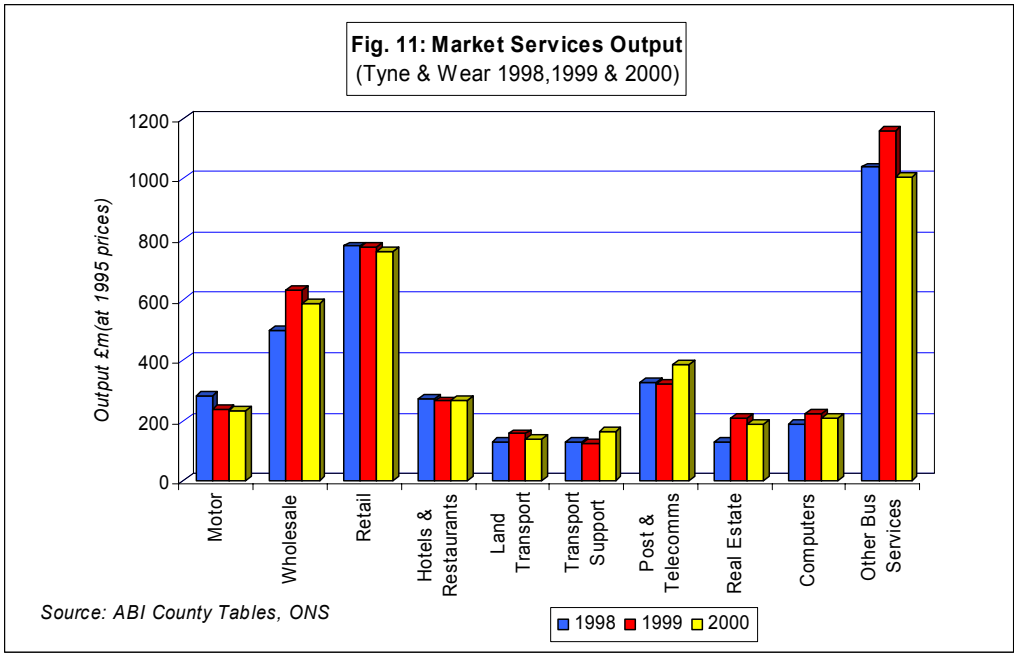
In 2000 Other Business Services held the largest share of market services output in Tyne & Wear at 22% (£1,144m), despite a drop from 24% in 1999. Retail (16.6%, £866m) and Wholesale (12.8%, £666m) services also held relatively high shares of output. Real Estate (4.1%, £216m) moved from tenth place in 1998 with a share of 2.9% to eighth place in 2000 (probably reflecting rising house prices and thus revenues). Of the top ten services in Tyne & Wear, the smallest, Land Transport, accounted for 3.1% of the total services output (£159m).

A similar pattern emerges in the UK. The Output Location Quotient divides the local share of services output by the corresponding UK share to give a measure of the industry locally relative to its size in the national economy in 2000 (Table 10). Retail services (1.34), was the most over-represented service industry in Tyne & Wear. Also over-represented were Post & Telecommunications (1.32) and Real Estate (1.16)[9]. Hotels & Restaurants (1.05) and Motor Trade (1.04) were only very slightly over-represented.

[8] *Output (GVA) from Education and Health & Social Work was £104.5m altogether in 2000. This was 2% of the total marker services output in 2000.*

[9] *The UK Real Estate figure was estimated by TWRI, therefore the Output Location Quotient is also an estimate for this industry.*

Despite holding the largest share of total services output in Tyne & Wear, Other Business Services (0.92) was slightly under-represented in Tyne & Wear compared to its UK share. Also slightly under-represented was Wholesale (0.96).
The most under-represented major services were Transport Support (0.88), Computer Services (0.75) and Land Transport (0.75). This suggests relatively low local demand for transport services and computer services.



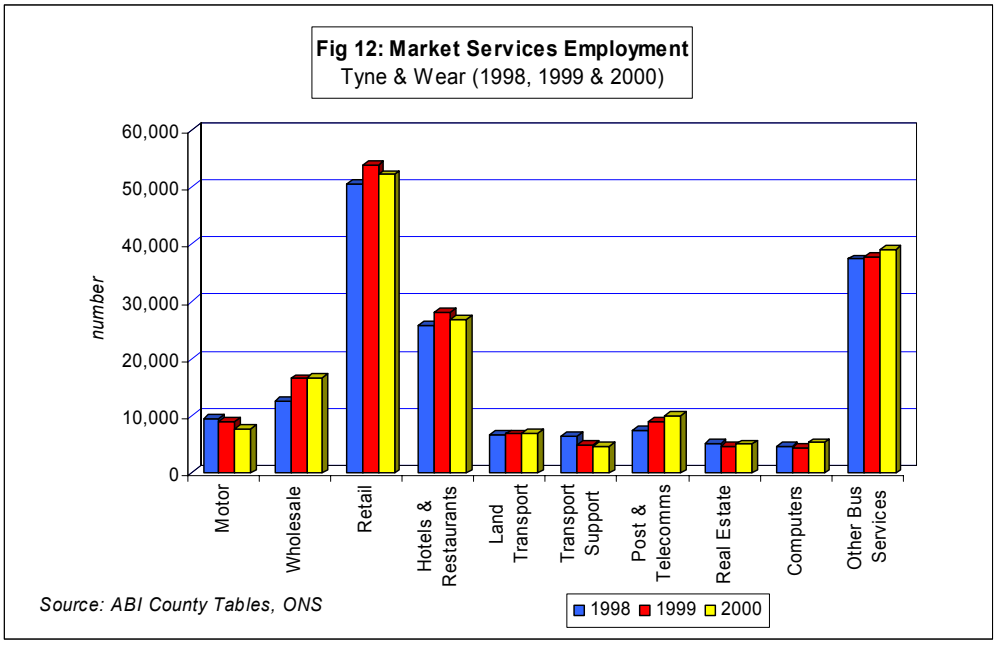
Note: Bar charts for Market Services show the services in SIC sequence.

Tyne & Wear's market services output rose by 3.5% between 1998 and 2000, to £4,582m (1995 prices). This is low compared to the 10% rise in the UK. In the most recent year 1999-00, Tyne & Wear's service output dropped 5%. This followed a rise of 9% over the previous year 1998-99 (1995 prices). Fig. 11 shows that there was a big rise in Post & Telecoms in 1999-00 of 21% to £387m (probably due to mobile phone centres). The output of Other Business Services and Land Transport both fell, by 13% (to £1,007m) and 11% (to just £140m) (1995 prices) respectively (perhaps linked to falls in manufacturing).

Over the longer period 1998-2000 there was a large increase in the output of Real Estate services (48%, to £190m). Other noticeable increases over this period were in Wholesale and Post & Telecommunications which both rose by 18%. During this period the output of Motor Services fell by 18%. The large rise in Post & Telecommunications output in Tyne & Wear is likely to be linked to the large increase in call centres and call centre jobs over this period for companies such as Orange Telecommunications, One2One and Telewest Telecommunications. The Motor Services output fall is odd, given evidence of rising car ownership. Improved reliability of cars and longer service intervals, may, however, be exerting downward pressure.

10 MARKET SERVICES EMPLOYMENT

The total employment in all market services in 2000 recorded by ABI was 237,000. Total employment in the top 10 market services was 174, 600 people. Employment was highest in the Retail (52,100) and Other Business (39,100) service industries in Tyne & Wear (Fig. 12). During 1998-2000, there was an overall fall in employment in the market services in Tyne & Wear, (down 14%), despite a 5% rise in the top 10 industries. A substantial rise in employment was recorded in Post & Telecommunication services (+2,400, +32%). This reflects the rise in output in this service. Other, less significant, rises were in Retail, Hotels & Restaurants, Land Transport, Computers and Other Business Services industries. The recorded employment rise in Wholesaling (up 4,100, +32%) is incredibly high, and may be due to previous under-recordings. Significant falls were recorded in Transport Support services (-1,800, -27%) and Motor services (-1,900, –20%)



11 MARKET SERVICES PRODUCTIVITY

In 2000 market services productivity in Tyne & Wear at £21,929 was around 30% below the UK and 6% above the North East (Table 13).

Productivity levels are a measure of efficiency in the use of labour. They provide a guide towards future output and employment performance. In this report Productivity is defined as 'Gross Value Added per Employee'.

Caution: Productivity is calculated simply per employee. In market services there is substantial part-time employment, which depresses its averages relative to manufacturing. Moreover in Tyne & Wear, retailing is substantially over-represented (Output Location Quotient 1.34) relative to the UK. Its high part-time employment will tend to depress the average productivity level for market services as a whole.

Table 13: Productivity Levels in Major Market Services in Tyne & Wear with NE and UK Comparisons, 2000

SIC (92)	Services	Tyne & Wear (Current Prices)	Index of North East (NE=100)	Index of UK (UK=100)
74	Other Business Services	29,287	100.4	86.6
52	Retail	16,602	105.8	94.8
51	Wholesale	39,909	100.7	89.7
64	Post & telecommunications	44,051	109.7	94.2
55	Hotels and restaurants	11,385	101.4	83.3
50	Motor Trade	34,535	106.0	99.5
72	Computers	44,072	123.0	91.8
70	Real Estate	42,591	116.9	108.5
63	Transport support	39,200	96.0	94.9
60	Land Transport *	22,614	94.3	72.3
	All Market Services	**21,929**	**106.1**	**70.7**

** Includes road haulage, buses, taxis, rail and pipelines*

Table 13 shows that, in 2000, productivity in nine of the top 10 service industries in Tyne & Wear was below the UK average. Productivity is below 90% of UK levels in four services including Other Business Services (86.6) and Hotels & Restaurants (83.3). This may reflect relatively routine, lower value-added (VA) activities in Business Services. In Hotels & Restaurants it may reflect a relative lack of high price, high VA establishments (although this may be changing)[10]. Real Estate productivity was 8.5% higher than the UK average.

There were only two service industries that had productivity levels below the NE average; Transport Support (by 4%) and Land Transport (by 6%). The largest service industry in Tyne & Wear by output, Other Business Services, achieved effectively the same productivity level as the North East (0.4% higher), but underperformed the UK by 13.4%. The second largest service industry in Tyne & Wear, by output, 'Retail' achieved a higher productivity than the North East (by 6%) but was around 5% below the UK average. The higher productivity than the North East may reflect relatively large stores and economies of scale in Tyne & Wear. The Computer Service industry was the best performing industry, compared to the North East, with a productivity level 23% above the North East average, although it was 8% below the UK average. This may have captured some of the success of Sage Group plc. [11]

[10] *Wholesale productivity is marginally under 90% and Land Transport is oddly low at 70.7. This may reflect distortions due to subsidies to public transport.*

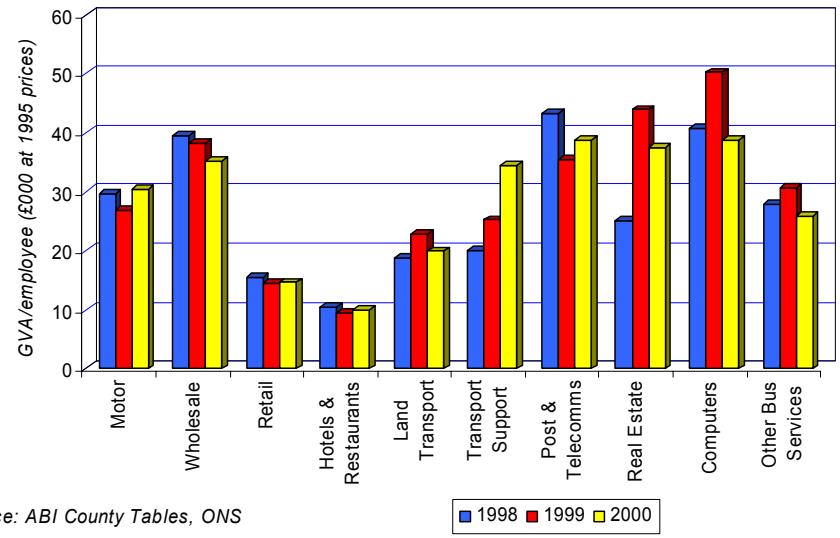
[11] *Sage Group plc is the largest software company in the UK, and is based in Newcastle.*

11.1 PRODUCTIVITY GROWTH

Productivity in Tyne & Wear market services grew by 19% to £19,300 (1995 prices) in Tyne & Wear between 1998 and 2000. This was equal to the UK's productivity growth. Broken down by industry, it rose very sharply in Transport Support (+42%, to £34,510) and Real Estate services (+33%, to £37,490), although in Real Estate there was a fall in productivity of 15% between 1999 and 2000 (Fig.13) (at 1995 prices). Other smaller rises were achieved in the Land Transport Services (+6%, to £19,910) which saw a slight fall in 2000 and Motor Services (+3%, to £30,400).

Productivity fell by over 12% in Wholesale (to £35,130) and nearly 12% in Post & Telecommunications Services (to £38,780) within the same period. Lower average productivity in telecoms may reflect much more call centre work (low VA) and less engineering work (high VA). The remaining largest service industries in Tyne & Wear, by output, suffered a fall in productivity of between 4% and 8%.

Fig. 13: Market Services Productivity
Tyne & Wear (1998, 1999 & 2000)



Source: ABI County Tables, ONS

12 MARKET SERVICES OPERATING PROFIT

12.1 OPERATING PROFIT LEVELS

In 2000 operating profits for market services in Tyne & Wear were £1,849m in current prices. Between 1998 and 2000, they fell overall by 16% to £1,627m (in 1995 prices), although there was a rise in 1999 to £2,124m (in 1995 prices). This overall decline resulted from a 3.5% increase in output combined with a much larger (19%) increase in labour costs. This is in contrast to the UK where (in 1995 prices) operating profits rose 6% over the period 1998-2000 from £142bn to £150bn, despite falling 2.3% between 1999 and 2000.

12.2 OPERATING PROFIT MARGINS

Table 11 shows that, in 2000, profit margins averaged 36% in Tyne & Wear, 7 points below the UK (average 43%) and just 2 points below the North East (average 38%). Two of the major Tyne & Wear service industries, however, had higher profit margins than the UK, Real Estate (51%; UK 50%) and Transport Support (55%; UK 49%).

There is no noticeable relationship between the largest industries in Tyne & Wear, by output, and high profit margins. Other Business Services, which is the largest service industry in Tyne & Wear by output, greatly under-performed the UK average; 32% in Tyne & Wear compared to 46% in the UK (Table11). However, Transport Support, which is the ninth largest service industry in Tyne & Wear has the highest profit margin among the major industries at 55%, which is 6 percentage points higher than the UK and 5 percentage points greater than the North East average.

Tyne & Wear under-performed in comparison with the North East most notably in the Other Business Services and Land Transport service industries. Other Business Services performed 9 percentage points lower than the North East and 14 percentage points below the UK. Profit margins in the Land Transport service industry were 10 percentage points lower than the North East average and 13 percentage points below the UK.

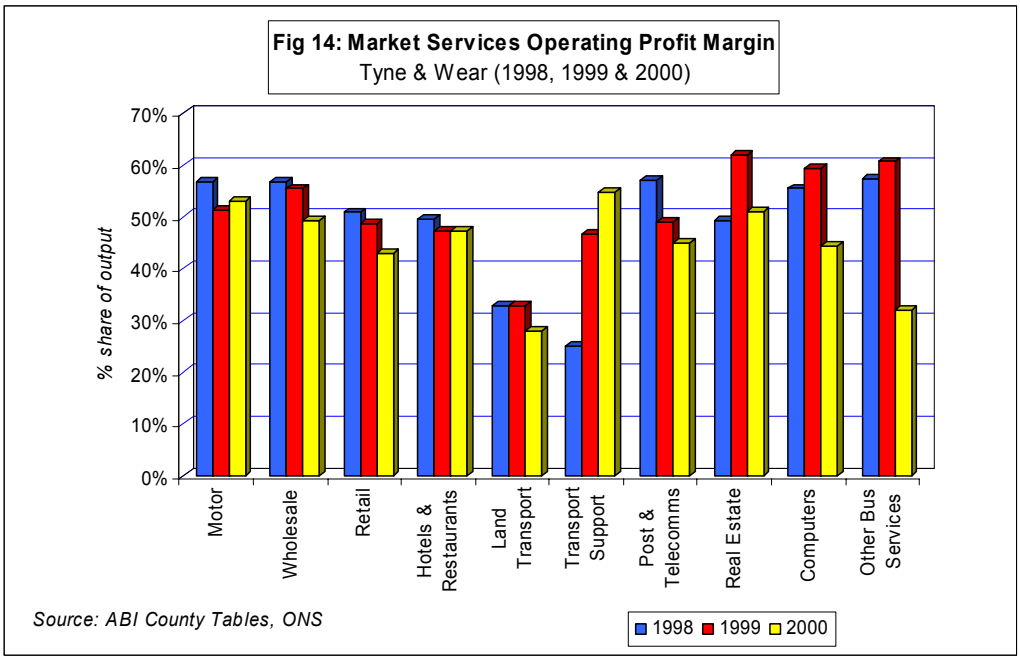
Table 14: Operating Profit Margin by Market Services, 2000

SIC (92)	Service	Profit Margin		
		Tyne & Wear	North East	UK
74	Other Business Services	32%	41%	46%
52	Retail	43%	45%	47%
51	Wholesale	49%	49%	50%
64	Post & telecommunications	45%	40%	46%
55	Hotels and restaurants	47%	48%	48%
50	Motor Trade	53%	55%	56%
72	Computers	44%	36%	44%
70	Real Estate	51%	51%	50%
63	Transport support	55%	50%	49%
60	Land Transport *	28%	38%	41%
	All Market Services	**36%**	**38%**	**43%**

** Includes road haulage, buses, taxis, rail and pipelines*

Between 1998 and 2000 operating profit margins in Tyne & Wear fell overall by 4 percentage points in Tyne & Wear, compared with a 2 percentage point fall in the UK.

The recession in 2000 in Business Services and IT seems to show in the data. The greatest falls occurred in Other Business Services (down 25 percentage points), Post & Telecommunications (down 12 percentage points) and Computers (down 11 percentage points). Both Computers and Other Business Services actually increased their profit margins between 1998-99 before suffering a large fall in 1999-00. The only two service industries where operating profit margins rose between 1998 and 2000 were Transport Support (up 30 percentage points) and Real Estate (up only 2 percentage points).



13 MARKET SERVICES INVESTMENT

Net investment by market services in 2000 was £1,176m (10% of GDP), nearly four times the investment in manufacturing (£301m) (current prices).

Investment growth 1998-2000 was faster in services for business markets than for those serving consumer markets. Between these years, at 1995 prices, market services investment rose 9%, faster than the UK (up 5%). This investment rise in Tyne & Wear was led by Post & Telecoms, in practice very likely due to growing mobile phone operations (up 50%+ to £319m). Other rises were not so rapid in Computer Services (up 35% to £31m) and Other Business Services (up 23%, to £130m) (already hit by substantial drops in profitability). Investment in Land Transport rose by £27m (92%) to £56m, which may reflect investment in the £100m Metro extension to Sunderland (which opened in 2002).

Investment fell in the other six top ten industries focused on consumer markets. The biggest fall in Tyne & Wear, in percentage terms, appeared in Real Estate where investment fell from £48m in 1998 to a negative net investment of £26m in 2000 (1995 prices), a fall of over 155%.

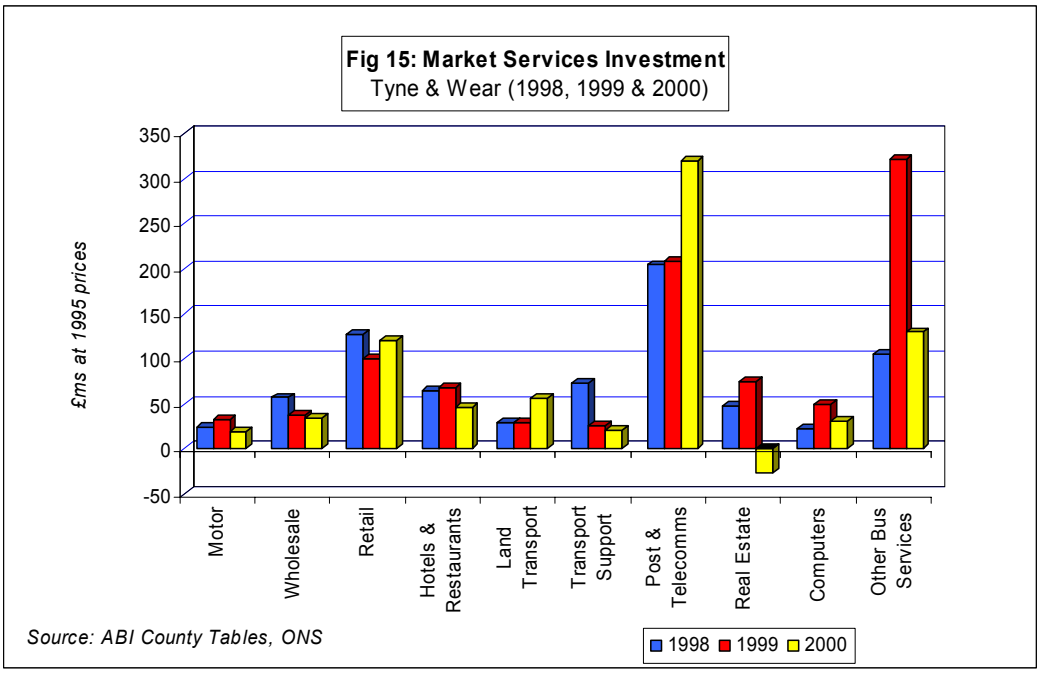


Table 15 shows that, in 2000, Post & Telecommunications had the highest level of investment (£319m at 1995 prices) accounting for 31% of service industry investment in Tyne & Wear. This high level of investment includes investment in mobile telephone networks, broadband etc. It may also have partly been in creating new call centres. Call centres were on the increase in this industry between 1998 and 2000. The second highest share (13%) was held by Other Business Services at £130m (at 1995 prices).

Table 15: Net Investment Levels, Market Services, 1998-2000

SIC (92)	Service	Tyne & Wear Net Investment at 1995 prices)		
		1998	1999	2000
74	Other Business Services	£105m	£322m	£130m
52	Retail	£127m	£100m	£121m
51	Wholesale	£57m	£37m	£35m
64	Post & telecommunications	£204m	£208m	£319m
55	Hotels and restaurants	£64m	£68m	£46m
50	Motor Trade	£25m	£33m	£18m
72	Computers	£23m	£50m	£31m
70	Real Estate	£48m	£75m	-£26m
63	Transport support	£73m	£26m	£21m
60	Land Transport *	£29m	£29m	£56m
	All Market Services	**£950m**	**£1298m**	**£1035m**

** Includes road haulage, buses, taxis, rail and pipelines*

Net investment per employee in Tyne & Wear in 2000 was £4,952 (at Current Prices). (Table 16). This was 14% above the North East average (£4,359) and 7% above the UK (£4,610). The positive difference between net investment per employee in Tyne & Wear and the UK and North East fell dramatically from 1999, when the Tyne & Wear figure was 19% higher than the UK and 21% higher than the North East. Conversely in 1998, net investment per employee in Tyne & Wear was 1% *lower* than the North East average and 10% lower than the UK.

Table 16: Net Investment per Employee in Market Services with UK Comparison, 2000

SIC (92)	Service	Tyne & Wear (at current prices, £)	TW/NE NE=100	TW/UK UK=100
74	Other Business Services	3,772	117.9	141.9
52	Retail	2,639	121.9	114.7
51	Wholesale	2,360	103.1	75.8
64	Post & telecommunications	36,307	93.0	181.4
55	Hotels and restaurants	1,946	115.8	75.2
50	Motor Trade	2,734	132.4	116.5
72	Computers	6,556	120.3	143.1
70	Real Estate	-5,876	*	-106.5
63	Transport support	5,148	116.6	43.9
60	Land Transport ^	9,066	148.1	227.3
	All Market Services	**4,952**	**113.6**	**107.4**

** North East data was suppressed* *^ Includes road haulage, buses, taxis, rail and pipelines*

14 MARKET SERVICES ESTABLISHMENT SIZE

In 2000 the average market services establishment had 12 employees, a half more than the UK average of 8 (Table 17). It was a fall from 14 employees per establishment in 1998 and 1999 in Tyne & Wear. Tyne & Wear size as a proportion of the UK average (TW/UK) fell to 1.49 in 2000 from 1.56 in both 1998 and 1999.

Table 17: Establishment Size* of Market Services with UK Comparison, 2000

SIC (92)	service	Tyne & Wear (per business)	UK (per business)	TW/UK
74	Other Business Services	10.2	8.0	1.28
52	Retail	10.2	9.1	1.12
51	Wholesale	11.7	8.6	1.36
64	Post & telecommunications	37.4	23.6	1.59
55	Hotels and restaurants	10.8	10.4	1.04
50	Motor Trade	7.2	6.5	1.11
72	Computers	6.3	3.7	1.70
70	Real Estate	5.5	4.3	1.28
63	Transport support	15.2	14.2	1.07
60	Land Transport ^	12.4	10.1	1.23
	All Market Services	**11.5**	**7.7**	**1.49**

** = Employees per business* *^ Includes road haulage, buses, taxis, rail and pipelines*

In 2000, all of the top 10 market services had an average establishment size greater than the UK. Establishment size was over 50% greater than the UK in Post & Telecommunications. It was closest in Hotels & Restaurants, where the Tyne & Wear size as a proportion of the UK average was 1.04.

15 MARKET SERVICES PURCHASING OF SERVICES

Purchasing patterns by the main market services in Tyne & Wear are here analysed in terms of purchases of the four major services. These are Road Transport, Telecommunications, Computer-related services and Advertising. In all cases this relates to purchases from external sources (outside the firm making the purchase).

15.1 PURCHASING OF KEY SERVICES

In 2000 establishments within the services industries in Tyne & Wear purchased Road Transport, Telecommunications, Computer and Advertising services valued at £617.5m (Table 18). Of this total spend 89% (over £549m) was by establishments within the Top 10 service industries. The Wholesale Industry was the heaviest purchaser, spending £180m on the four services in total, accounting for over 29% of purchasing by the services industry as a whole. Other industries with high spend on these services were Retail (spent £110m, nearly 18% of the total) and Post & Telecommunications (spent £85m, 14%).

Table 18: Purchasing of Key Services by Market Services in Tyne & Wear in 2000

SIC 92	Service (Buyer)	Service Purchases in Tyne & Wear (£m) Road Transport Services	Telecommun's Services	Computer Services	Advertising Services
50	Motor Trade	2.3	3.7	3.2	12.3
51	Wholesale	36.3	10.0	6.0	127.7
52	Retail	27.7	9.5	14.0	59.0
55	Hotels & Restaurants	0.9	3.0	1.6	6.6
60	Land Transport*	16.2	2.5	2.0	1.4
63	Transport Support	3.9	3.1	1.3	14.0
64	Post & Telecoms	6.4	12.8	21.7	44.1
70	Real Estate	1.1	3.1	2.5	3.3
72	Computers	1.5	4.6	8.2	10.0
74	Other Business Services	7.4	23.0	14.9	16.3
	Total (Top 10)	**103.8**	**75.3**	**75.4**	**294.8**
	All Market Services	**112.7**	**90.8**	**90.4**	**323.6**

** Includes road haulage, buses, taxis, rail and pipelines*

In terms of the four major services individually, spend was highest on Advertising Services for both the Top 10 service industries combined (£294.8m) and the whole service industry (£323.6m). The Wholesale Industry spent by far the most on Advertising Services (£127.7m), 43% of the total spend by the Top 10 service industries [This is oddly high – Ed.]

Other Business Services spent the most on Telecoms Services (£23m, 31% of total by Top 10 Services). This was nearly twice as much as the second highest, Post & Telecommunications (£12.8m, 17%)

Wholesale spent the most on Road Transport Services at £36.3m (35% of total by Top 10 Services) and Post & Telecommunications spent the most on Computer Services, £21.7m (29%).

Table 19: Spend on Key Services by Market Services in Tyne & Wear, the North East and UK, 2000

SIC (92)	Service (Buyer)	TW	NE	UK
50	Motor Trade	3.5	5.1	5.7
51	Wholesale	29.2	23.3	22.5
52	Retail	17.9	16.8	12.3
55	Hotels & Restaurants	2.0	2.7	2.3
60	Land Transport *	3.6	8.5	4.9
63	Transport Support	3.6	4.7	8.3
64	Post & Telecommunications	13.8	12.7	9.6
70	Real Estate	1.6	1.8	2.3
72	Computers	3.9	3.6	5.3
74	Other Business Services	10.0	11.9	14.1
	Top 10 Services	**88.9**	**91.1**	**87.4**
	All Services	**100**	**100**	**100**

** Includes road haulage, buses, taxis, rail and pipelines*

Purchases of key services tend to be from the top 10 service industries to similar degrees in Tyne & Wear (89%), the North East (91%) and the UK (87%).

In Tyne & Wear, however, the three largest industries in terms of purchases of key services are more dominant than in the UK; Wholesale 29%, Retailing 17% and Post & Telecoms 14%; together accounting for about 60% of purchases of key services by service industries in Tyne & Wear (44% in the UK).

15.2 PURCHASING OF KEY SERVICES AS A PROPORTION OF OUTPUT (GVA)

Market Services in Tyne & Wear and the UK spent the largest amounts (in relation to output) on Road Transport and Advertising. The same was true of the manufacturing industries.

The top 10 market services in Tyne & Wear spent 2.3% of output on Road Transport (Table 20). In the UK the proportion was slightly higher at 3.7%. The market services with, by far, the largest spends on Road Transport were Wholesale (£36m) and Retailing (£28m). Together they accounted for about 60% of the market services spend on Road Transport. In Tyne & Wear, Land Transport spent the largest proportion, in relation to output, on Road Transport (10.2%), (9.6% in the UK). The most striking difference between Tyne & Wear and the UK was for Transport Support. In Tyne & Wear this service spent just 2.1% relative to output on Road Transport, whilst the corresponding UK proportion was 14.5%.

Table 20: Market Services' Expenditure on Road Transport as a % of Output (GVA), 2000

SIC (92)	Market Service	Expenditure on Road Transport Services £m	Output (GVA (£m)) in Tyne & Wear	Expenditure on Road Transport Services as Proportion of GVA %	Corresponding UK Proportions %
50	Motor Trade	2.3	264.6	0.9	2.1
51	Wholesale	36.3	665.8	5.5	8.1
52	Retail	27.7	865.5	3.2	3.3
55	Hotels & Restaurants	0.9	306.4	0.3	0.4
60	Land Transport*	16.2	159.1	10.2	9.6
63	Transport Support	3.9	185.3	2.1	14.5
64	Post & Telecoms	6.4	439.8	1.5	2
70	Real Estate	1.1	216.1	0.5	not available
72	Computers	1.5	235.5	0.6	0.8
74	Other Business Services	7.4	1,144.1	0.6	0.8
	Total Top 10	103.8	4,482.4	2.3	3.7
	All Market Services	112.7	5,205.0	2.2	not available

**includes road haulage, buses, taxis, rail and pipelines*

In Tyne & Wear, the top 10 market services spent 6.6% of output on Advertising (Table 21). This was almost 2 percentage points higher than in the UK (4.9%). This could be sub-contracting haulage. Wholesale spent the largest proportion relative to output on Advertising (nearly a fifth, 19.2%). This was around three times as big as the corresponding UK proportion (6.7%). Post & Telecoms in Tyne & Wear spent the equivalent of a tenth of their output on Advertising (10%), compared to 8.9% in the UK. The UK's Motor Trade spent the equivalent of 8.7% of their output on Advertising, nearly twice the Tyne & Wear proportion (4.7%).

Table 21: Market Services' Expenditure on Advertising as a % of Output (GVA), 2000

SIC (92)	Market Service	Expenditure on Advertising Services £m	Output (GVA (£m)) in Tyne & Wear	Expenditure on Advertising Services as Proportion of GVA %	Corresponding UK Proportions %
50	Motor Trade	12.3	264.6	4.7	8.7
51	Wholesale	127.7	665.8	19.2	6.7
52	Retail	59.0	865.5	6.8	5.7
55	Hotels & Restaurants	6.6	306.4	2.2	2.8
60	Land Transport*	1.4	159.1	0.9	1.2
63	Transport Support	14.0	185.3	7.6	5.2
64	Post & Telecoms	44.1	439.8	10.0	8.9
70	Real Estate	3.3	216.1	1.5	not available
72	Computers	10.0	235.5	4.2	3.0
74	Other Business Services	16.3	1,144.1	1.4	2.6
	Total Top 10	294.8	4,482.4	6.6	4.9
	All Market Services	323.6	5,205.0	6.2	not available

**includes road haulage, buses, taxis, rail and pipelines*

16 FINANCIAL SERVICES

Data for financial services are not present in the ABI county tables. This is a significant omission from the market services sector, which TWRI estimates to be worth over £500m in 2000 (4% of GDP).

Caution: Output has been estimated by TWRI on the assumption that financial services productivity in Tyne & Wear is the same as in the NE. Since employment in Tyne & Wear financial services is known, but not its output, making the above assumption produces a rough estimate of output (employment x productivity = output). In fact one might expect Tyne & Wear's financial services productivity to be somewhat higher – due to the higher value activities associated with a regional centre. Conversely it might be lower due to the relatively low value call centres in Tyne & Wear financial services.

Financial services output (GVA) for the NE was obtained from ONS' publication 'Regional Gross Value Added' (August 2003). Employee numbers have been obtained from ABI, as elsewhere in this report, for financial services in Tyne & Wear, the North East and GB. The GB employment total has been scaled up by 1.6% to create a UK employment total. This is necessary since the national output data are for GB. (Northern Ireland has around 1.6% of UK Financial Services employees, from ONS Labour Market Trends, February 2004.)

Financial services consists of three SIC services:

- SIC 65 Financial Intermediation (except insurance and pension funding) i.e. banks, building societies etc.
- SIC 66 Insurance and Pension Funding (except compulsory social security).
- SIC 67 Activities Auxiliary to Financial Intermediation

16.1 OUTPUT

In 2000 the value of output of the Financial Services is estimated at £510.5m (in current prices).
Output of Financial Services rose marginally in Tyne & Wear (0.2%) between 1998 and 2000 to £449m (Table 22). Over the same period, output declined in the North East (-2.5%) to £763m and even more so in the UK (-3.2%) to £40,304m.

Table 22: Financial Intermediation Output (GVA) in Tyne & Wear, the NE and the UK, 1998-2000 (In 1995 Prices).

	Output (£m) 1998	Output (£m) 1999	Output (£m) 2000	% Change 1998-2000
Tyne & Wear*	448	405	449	0.2
North East	783	729	763	-2.5
UK	41,648	38,839	40,304	-3.2

* *Tyne & Wear output figures are TWRI estimates. See caution note above for information on how they were calculated.*

Caution: The above estimates of GVA in Financial Services are before the deduction of FISIM, which ONS conventionally subtracts from GVA, shown as a separate item. FISIM is explained in detail in Appendix 13.

Source: Regional Gross Value Added , August 2003, ONS

16.2 EMPLOYMENT

Financial Services employment in Tyne & Wear rose by 2% overall between 1998 and 2000 to 12,200. (Table 23). This is relatively high compared to a fall of 1% in the North East, but the UK saw a rise of 3%.

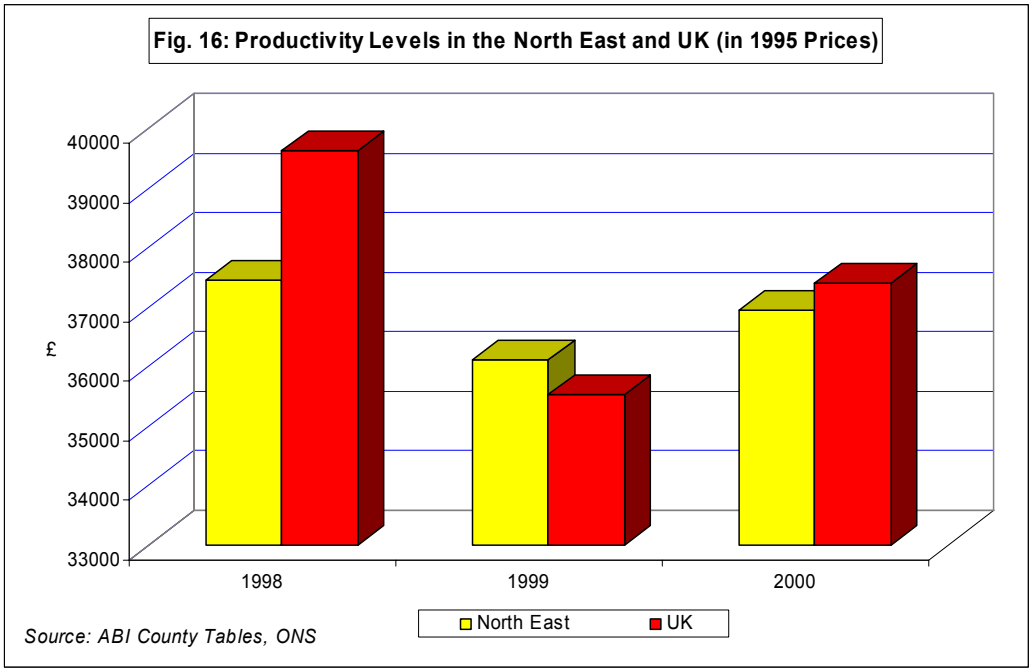
Table 23: Changes in Employment in Financial Services in Tyne & Wear, the NE and the UK, 1998-2000

	Tyne & Wear No. of Employees	Tyne & Wear Index 1998=100	North East Index 1998=100	UK* Index1998=100
1998	12000	100	100	100
1999	11200	94	97	104
2000	12200	102	99	103

* *UK employment figures have been estimated by TWRI from GB. See caution note above for details.*
Source: Annual Business Inquiry Employee Analysis, NOMIS

16.3 PRODUCTIVITY

Productivity in Tyne & Wear is assumed by TWRI to be the same as in the North East – introductory paragraph above. In the North East productivity fell between 1998 and 2000 by 1.3% to £36,941, compared to a 5.6% fall in the UK, to £37,402 (1995 prices). (See Fig. 16). Productivity was considerably lower in the North East than the UK in 1998, slightly higher in 1999 and just slightly lower than the UK in 2000.



Note: TWRI assumes Financial Services productivity in Tyne & Wear to be the same as in the North East.

Productivity in Financial Services, at £41,965 in current prices (£36,941 in 1995 prices) appears to be about double the average for market services as a whole.

17 THE CONSTRUCTION INDUSTRY

The Construction industry is particularly difficult to measure. The ABI covers firms and employees. It does not capture output from the self-employed. The omission of self-employment is particularly serious in construction, as it constitutes a fifth of employment in the industry.[12]

17.1 OUTPUT

In 2000 the value of output from Tyne & Wear's construction industry was £496m, about 4% of GDP, comparable to Post & Telecommunications £440m (in current prices), listed in the Top 10 Service Industries. This output total is especially low and implausible; the productivity collapse of 29% to under £20,000 would, in practice, have caused appalling financial performances.

Construction output is made up of the following elements:

- a) house building (private and public);
- b) commercial (retail, hotels and offices[13]);
- c) industrial (factories and warehouses);
- d) public investment (infrastructure, education, health)

Industrial and public investment construction were probably low in 2000. In Tyne & Wear, new factory building has been at a low level since the late 1990s. Public investment, except on the Metro extension (opened 2002), has risen sharply since 2000, especially on new school buildings (under the PFI). Land reclamation at Newburn Riverside might have been missed. House building could be worth over £100m in terms of GVA, at least a fifth of construction output.[14] House building rates have risen in Tyne & Wear since 2000.

17.2 EMPLOYMENT & PRODUCTIVITY

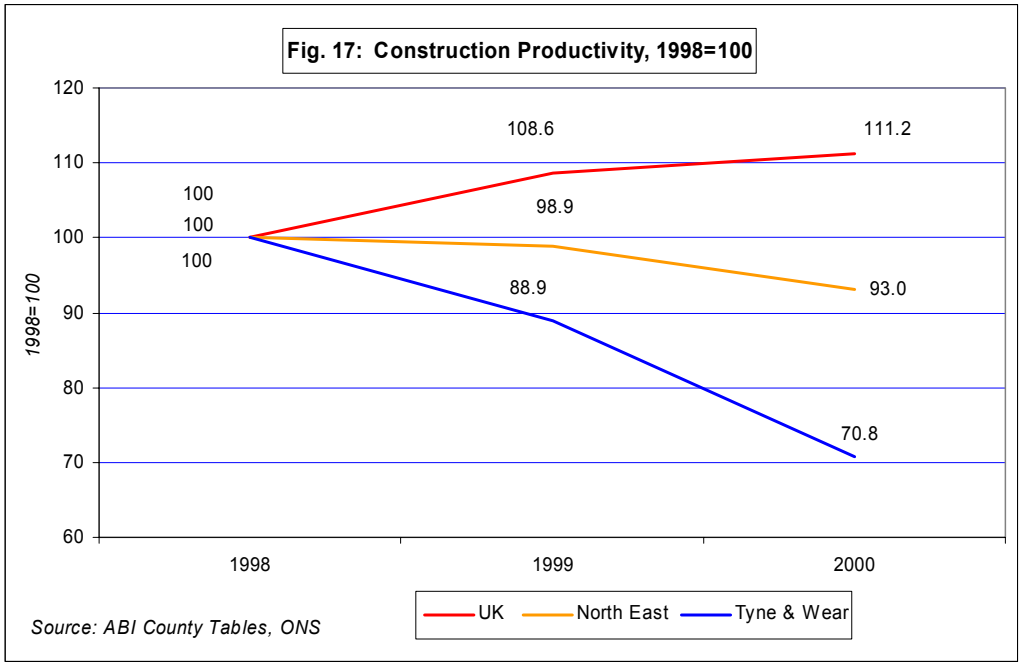
In 2000 there were 22,700 people employed in the Construction Industry in Tyne & Wear, about 4% of all employees. This was more than in any of the major Manufacturing Industries and comparable to some Top 10 Service Industries. The number of people employed in the Construction Industry in Tyne & Wear fell 1.4% between 1998 and 2000, compared with a rise of 1.8% in the UK.

In this report productivity is defined as 'Gross Value Added per Employee'. In 2000 the Construction Industry in Tyne & Wear had a productivity level of £21,867 (Current Prices). This was £10,800 less than in the UK and £3,270 less than in the North East.

[12] *2001 Census © Crown Copyright (SO38) (amongst 16-74 year-olds)*

[13] *The office complex on St. James' Boulevard, Newcastle city centre was built in 2000.*

[14] *This figure assumes about £50,000 of GVA for each dwelling and 2,000 dwelling completions pa.*



Productivity in Tyne & Wear's Construction Industry declined by 32%, (from £27,183) between 1998 and 2000 (in 1995 Prices). The North East suffered a much milder fall, down by 7% (from £23,783) during the period. These falls were in contrast to the UK's Construction Industry which showed a rise of 11% (from £25,893) in productivity between 1998 and 2000.

17.3 OPERATING PROFIT

In 2000, Operating Profit for the Construction Industry in Tyne & Wear was £131m in current prices. Between 1999 and 2000 operating profit fell by 53% (in 1995 Prices). This followed a much smaller rise between 1998 and 1999 (up 12%). It fell 47% overall in the two years. In contrast, operating profits in the UK's Construction Industry rose by 18% between 1998 and 2000.

17.4 OPERATING PROFIT MARGINS

In 2000, the Profit Margin in the Construction Industry in Tyne & Wear was 26%; far below the UK profit margin (44%) and below the North East (32%).
Between 1999 and 2000, the Profit Margin in Tyne & Wear's Construction Industry suffered a large fall (down almost 15 percentage points). This followed a rise between 1998 and 1999 (up 6 percentage points). Overall between 1998 and 2000, there was a fall of 9 pp in operating profit margins in Tyne & Wear, compared with a rise of 3 pp in the UK.

17.5 INVESTMENT

Investment in the Construction Industry in Tyne & Wear suffered a large fall, between 1998 and 1999; down 69% (from £44.2m in 1995 prices). This was followed by a strong recovery between 1999 and 2000, with investment returning much closer to its 1998 level, at £42.3m.

Net investment per employee in 2000 was £2,100 (in current prices). This was higher than both the North East (£1,500) and the UK (£1,600).

17.6 ESTABLISHMENT SIZE

In 2000, the average Construction Industry establishment in Tyne & Wear had 11 employees. This is nearly twice as many as the UK average of 6, but very close to the North East average of 10. Between 1998 and 2000 there was very little change in the average establishment size in Tyne & Wear, the North East, or the UK.

17.7 PURCHASING OF SERVICES

The Construction Industry in Tyne & Wear followed a similar pattern to the UK in 2000, in terms of its (£18.6m) spend on the four main services; Road Transport, Telecommunications, Computer Services and Advertising Services. The largest service purchase by the Construction Industry in both Tyne & Wear and the UK was Telecommunications, accounting for around one third of their total spend; Tyne & Wear (33.1%), UK (34.5%).

Table 24: Purchasing of the Key Services by the Construction Industry in Tyne & Wear, the NE and the UK, 2000

Service	Tyne & Wear		North East		UK	
	£m	% of Total	£m	% of Total	£m	% of Total
Road Transport Services	4.1	22.3	18.1	34.8	361.2	25.6
Telecommunication Services	6.2	33.1	14.4	27.7	487.5	34.5
Computer Services	3.3	17.7	7.4	14.2	192.9	13.7
Advertising Services	5.0	27.0	12.2	23.4	370.3	26.2
Total	18.6	100.0	52.1	100.0	1411.8	100.0

APPENDIX 1: MANUFACTURING IN TYNE & WEAR, 1998-2000: OUTPUT (GVA)

SIC(92)	INDUSTRY	Output at Current Prices (GVA (£m))			Output at 1995 Prices (GVA (£m))		
		2000	**1999**	**1998**	**2000**	**1999**	**1998**
DA	Food & Drink	238.9	230.7	258.6	210.3	207.4	237.6
DB	Textiles	60.2	61.7	97.1	53.0	55.5	89.2
DC	Leather	1.7	1.8	2.1	1.5	1.6	1.9
DD	Wood & Wood Products	23.4	42.4	53.1	20.6	38.1	48.8
DE	Paper, Printing	233.1	236.8	246.6	205.2	213.0	226.6
DF	Coke, Petroleum	5.0	5.1	7.1	4.4	4.6	6.5
DG	Chemicals	113.5	112.0	132.5	99.9	100.7	121.8
DH	Rubber & Plastics	130.9	155.4	145.9	115.3	139.7	134.1
DI	Other Non-Metals	104.1	65.8	67.0	91.7	59.1	61.6
DJ	Basic Metals	265.3	292.9	229.9	233.6	263.4	211.3
DK	Machinery & Equipment	334.5	242.4	217.2	294.4	218.0	199.7
DL	Electrical & Optical	349.0	395.2	432.4	307.2	355.4	397.5
DM	Transport Equipment	575.9	553.2	583.5	506.9	497.5	536.3
DN	Manufacture nec	102.6	105.2	119.8	90.3	94.6	110.1
Process	DF,DG,DI	222.6	182.9	206.6	196.0	164.4	189.9
Engineering	DJ-DM	1524.6	1483.6	1463.0	1342.1	1334.2	1344.7
Other Manu.	DA-DE,DH,DN	790.8	833.9	923.1	696.1	749.9	848.5
	All Manufacturing	**2538.0**	**2500.4**	**2592.7**	**2234.2**	**2248.5**	**2383.0**

APPENDIX 2: MANUFACTURING IN TYNE & WEAR, 1998-2000: PRODUCTIVITY

SIC(92)	INDUSTRY	Productivity at Current Prices (£)			Productivity at 1995 Prices (£)		
		2000	**1999**	**1998**	**2000**	**1999**	**1998**
DA	Food & Drink	33,032	32,815	34,706	29,077	29,510	31,899
DB	Textiles	18,943	19,002	17,701	16,675	17,089	16,269
DC	Leather	20,471	28,254	26,718	18,020	25,408	24,557
DD	Wood & Wood Products	20,772	39,096	44,743	18,285	35,158	41,124
DE	Paper, Printing	30,548	30,902	30,286	26,891	27,789	27,836
DF	Coke, Petroleum	41,639	64,304	85,205	36,654	57,827	78,313
DG	Chemicals	35,501	44,243	39,932	31,251	39,787	36,702
DH	Rubber & Plastics	28,601	32,441	32,636	25,177	29,174	29,996
DI	Other Non-Metals	41,574	25,557	26,021	36,597	22,983	23,916
DJ	Basic Metals	27,971	30,842	26,125	24,623	27,735	24,012
DK	Machinery & Equipment	38,090	31,497	22,229	33,530	28,325	20,431
DL	Electrical & Optical	32,983	30,256	32,466	29,034	27,209	29,840
DM	Transport Equipment	57,214	52,917	52,565	50,364	47,587	48,313
DN	Manufacture nec	20,981	24,815	26,430	18,469	22,315	24,292
Process	DF,DG,DI	38,239	35,274	34,568	33,661	31,721	31,772
Engineering	DJ-DM	39,181	36,447	34,031	34,490	32,776	31,279
Other Manu.	DA-DE,DH,DN	27,537	29,661	29,451	24,240	26,673	27,069
	All Manufacturing	**34,555**	**33,741**	**32,284**	**30,417**	**30,384**	**29,672**

APPENDIX 3: MANUFACTURING IN TYNE & WEAR, 1998-2000: OPERATING PROFITS AND PROFIT MARGINS

SIC(92)	INDUSTRY	Operating Profits (Current Prices (£m))			Operating Profits (1995 Prices (£m))			Profit Margin (Current Prices)		
		2000	1999	1998	2000	1999	1998	2000	1999	1998
DA	Food & Drink	109.1	103.8	127.6	96.0	93.4	117.3	46%	45%	49%
DB	Textiles	17.6	18.1	20.5	15.5	16.2	18.8	29%	29%	21%
DC	Leather	0.8	0.9	0.8	0.7	0.8	0.8	43%	50%	39%
DD	Wood & Wood Products	8.4	24.7	33.0	7.4	22.2	30.3	36%	58%	62%
DE	Paper, Printing	90.2	95.3	78.8	79.4	85.7	72.4	39%	40%	32%
DF	Coke, Petroleum	2.6	3.4	4.6	2.3	3.1	4.3	52%	67%	65%
DG	Chemicals	34.4	36.0	60.0	30.3	32.4	55.2	30%	32%	45%
DH	Rubber & Plastics	31.8	57.0	59.1	28.0	51.2	54.3	24%	37%	40%
DI	Other Non-Metals	53.4	20.0	24.5	47.0	18.0	22.5	51%	30%	37%
DJ	Basic Metals	72.8	89.7	53.5	64.1	80.6	49.2	27%	31%	23%
DK	Machinery & Equipment	94.2	78.1	-7.1	82.9	70.3	-6.5	28%	32%	-3%
DL	Electrical & Optical	120.4	128.1	158.2	106.0	115.2	145.4	35%	32%	37%
DM	Transport Equipment	289.2	288.7	272.3	254.6	259.6	250.2	50%	52%	47%
DN	Manufacture nec	32.4	42.1	45.4	28.5	37.9	41.7	32%	40%	38%
Process	DF,DG,DI	90.5	59.4	89.1	79.6	53.4	81.9	41%	32%	43%
Engineering	DJ-DM	576.7	584.6	476.9	507.6	525.7	438.3	38%	39%	33%
Other Manu.	DA-DE,DH,DN	290.2	341.9	365.1	255.5	307.5	335.6	37%	41%	40%
	All Manufacturing	957.3	985.8	931.1	842.7	886.5	855.8	38%	39%	36%

APPENDIX 4: MANUFACTURING IN TYNE & WEAR, 1998-2000: NET INVESTMENTS

SIC(92)	INDUSTRY	Net Investment (Current Prices (£m))			Net Investment (1995 Prices (£m))		
		2000	**1999**	**1998**	**2000**	**1999**	**1998**
DA	Food & Drink	24.0	31.4	35.4	21.1	28.2	32.5
DB	Textiles	3.3	5.1	7.9	2.9	4.6	7.3
DC	Leather	0.1	0.2	0.2	0.1	0.2	0.2
DD	Wood & Wood Products	1.3	3.2	3.1	1.1	2.9	2.8
DE	Paper, Printing	26.2	34.0	33.0	23.1	30.6	30.3
DF	Coke, Petroleum	0.5	0.3	0.5	0.4	0.3	0.5
DG	Chemicals	12.9	21.1	24.9	11.4	19.0	22.9
DH	Rubber & Plastics	19.5	22.6	43.2	17.2	20.4	39.7
DI	Other Non-Metals	8.1	9.3	9.9	7.1	8.4	9.1
DJ	Basic Metals	32.8	38.5	33.6	28.9	34.6	30.9
DK	Machinery & Equipment	20.7	19.8	16.4	18.2	17.8	15.1
DL	Electrical & Optical	44.8	73.7	227.2	39.4	66.3	208.9
DM	Transport Equipment	98.1	190.2	169.1	86.4	171.0	155.4
DN	Manufacture nec	8.2	11.2	13.6	7.2	10.0	12.5
Process	DF,DG,DI	21.5	30.7	35.4	18.9	27.6	32.5
Engineering	DJ-DM	196.4	322.2	446.4	172.9	289.7	410.3
Other Manu.	DA-DE,DH,DN	82.6	107.7	136.5	72.7	96.8	125.4
	All Manufacturing	300.5	460.6	618.3	264.5	414.2	568.2

APPENDIX 5: MANUFACTURING IN TYNE & WEAR, 1998-2000: NET INVESTMENT PER EMPLOYEE

SIC(92)	INDUSTRY	Net Investment per Employee (Current Prices (£))			Net Investment per Employee (1995 Prices (£))		
		2000	**1999**	**1998**	**2000**	**1999**	**1998**
DA	Food & Drink	3,312	4,463	4,753	2,916	4,013	4,369
DB	Textiles	1,045	1,582	1,442	920	1,423	1,325
DC	Leather	1,494	3,079	2,846	1,315	2,769	2,616
DD	Wood & Wood Products	1,141	2,937	2,612	1,004	2,641	2,400
DE	Paper, Printing	3,435	4,438	4,052	3,023	3,991	3,725
DF	Coke, Petroleum	4,269	3,772	6,277	3,758	3,392	5,769
DG	Chemicals	4,045	8,329	7,512	3,561	7,490	6,904
DH	Rubber & Plastics	4,268	4,726	9,660	3,757	4,250	8,879
DI	Other Non-Metals	3,219	3,620	3,861	2,834	3,256	3,549
DJ	Basic Metals	3,457	4,055	3,824	3,043	3,646	3,514
DK	Machinery & Equipment	2,356	2,567	1,676	2,074	2,308	1,541
DL	Electrical & Optical	4,232	5,646	17,060	3,725	5,078	15,680
DM	Transport Equipment	9,748	18,192	15,237	8,581	16,359	14,004
DN	Manufacture nec	1,674	2,635	3,009	1,473	2,369	2,765
Process	DF,DG,DI	3,694	5,922	5,922	3,252	5,326	5,443
Engineering	DJ-DM	5,046	7,915	10,384	4,442	7,117	9,544
Other Manu.	DA-DE,DH,DN	2,877	3,831	4,354	2,532	3,445	4,002
	All Manufacturing	**4,091**	**6,215**	**7,698**	**3,601**	**5,597**	**7,075**

APPENDIX 6: MANUFACTURING IN TYNE & WEAR, 1998-2000: ESTABLISHMENT SIZE (AVERAGE NO. OF EMPLOYEES)

SIC(92)	INDUSTRY	Establishment Size 2000		Establishment Size 1999		Establishment Size 1998	
		Tyne & Wear	UK	Tyne & Wear	UK	Tyne & Wear	UK
DA	Food & Drink	34.3	43.8	32.0	44.3	34.3	42.6
DB	Textiles	28.9	18.3	26.2	19.8	37.3	21.0
DC	Leather	9.4	18.6	7.9	21.7	9.8	23.6
DD	Wood & Wood Products	11.6	9.1	10.9	8.9	12.1	9.3
DE	Paper, Printing	21.6	12.8	21.9	13.1	23.4	13.3
DF	Coke, Petroleum	19.8	76.7	13.2	74.4	10.4	69.0
DG	Chemicals	48.5	47.2	40.2	48.1	47.4	50.3
DH	Rubber & Plastics	38.5	28.3	42.8	29.4	38.2	30.1
DI	Other Non-Metals	23.0	17.9	22.0	18.5	23.6	19.0
DJ	Basic Metals	20.2	14.6	21.1	15.3	20.0	15.5
DK	Machinery & Equipment	43.7	22.8	38.7	22.3	45.9	23.8
DL	Electrical & Optical	44.5	26.7	53.3	26.8	55.7	28.2
DM	Transport Equipment	127.4	60.1	135.8	60.1	127.6	64.6
DN	Manufacture nec	18.4	9.8	16.6	9.9	17.8	10.2
Process	DF,DG,DI	32.2	30.8	11.0	31.5	12.9	32.9
Engineering	DJ-DM	39.4	23.3	41.9	23.5	43.9	24.4
Other Manu.	DA-DE,DH,DN	24.6	17.4	24.0	17.9	26.3	18.3
	All Manufacturing	31.5	20.6	31.9	21.1	34.1	21.7

APPENDIX 7: MARKET SERVICES IN TYNE & WEAR, 1998-2000: OUTPUT (GVA)

SIC (92)	Market Service	Output at Current Prices (GVA (£m))			Output at 1995 Prices (GVA (£m))		
		2000	1999	1998	2000	1999	1998
45	Construction	496.1	663.3	680.4	436.7	596.5	625.3
	Top 10 Service Industries:						
50	Motor, Sale & Repair	264.6	266.8	309.0	233.0	239.9	284.0
51	Wholesale (excludes motor vehicles)	665.8	700.5	541.6	586.1	630.0	497.8
52	Retailing including repairs	865.5	860.4	845.6	761.9	773.8	777.2
55	Hotels & Restaurants	306.4	294.9	296.4	269.7	265.2	272.4
60	Land Transport^	159.1	174.9	139.9	140.1	157.3	128.5
63	Transport Support, Travel Agents	185.3	139.9	141.7	163.1	125.8	130.3
64	Post & Telecommunications	439.8	356.2	357.1	387.2	320.3	328.2
70	Real Estate Activities	216.1	230.0	139.7	190.2	206.8	128.4
72	Computer and related activities	235.5	248.4	206.4	207.3	223.3	189.7
74	Other business activities	1144.1	1289.0	1129.3	1007.2	1159.2	1037.9
	Total Top 10	**4482.4**	**4561.0**	**4106.6**	**3945.8**	**4101.6**	**3774.4**
	All Market Services	**5205.3**	**5359.1**	**4814.6**	**4582.1**	**4819.3**	**4425.2**

^ *includes road haulage, buses, taxis, rail and pipelines*

APPENDIX 8: MARKET SERVICES IN TYNE & WEAR, 1998-2000: PRODUCTIVITY

SIC (92)	Market Service	Productivity at Current Prices (£)			Productivity at 1995 Prices (£)		
		2000	1999	1998	2000	1999	1998
45	Construction	21,867	26,876	29,576	19,249	24,169	27,184
	Top 10 Service Industries:						
50	Motor, Sale & Repair	34,535	29,745	32,231	30,400	26,749	29,624
51	Wholesale (excludes motor vehicles)	39,909	42,377	42,893	35,131	38,109	39,424
52	Retailing including repairs	16,602	16,009	16,751	14,614	14,396	15,396
55	Hotels & Restaurants	11,385	10,498	11,477	10,022	9,441	10,549
60	Land Transport^	22,614	25,432	20,477	19,906	22,871	18,821
63	Transport Support, Travel Agents	39,200	28,035	21,827	34,507	25,211	20,062
64	Post & Telecommunications	44,051	39,478	47,135	38,777	35,502	43,323
70	Real Estate Activities	42,591	48,809	27,264	37,492	43,893	25,059
72	Computer and related activities	44,072	55,798	44,209	38,796	50,178	40,633
74	Other business activities	29,287	34,168	30,230	25,780	30,727	27,785
	Total Top 10	25,669	26,046	24,655	22,596	23,422	22,661
	All Market Services	21,929	19,428	17,607	19,304	17,472	16,183

^ *includes road haulage, buses, taxis, rail and pipelines*

APPENDIX 9: MARKET SERVICES IN TYNE & WEAR, 1998-2000: OPERATING PROFITS AND PROFIT MARGIN

SIC (92)	Market Service	Operating Profits (Current Prices (£m))			Operating Profits (1995 Prices (£m))			Profit Margin (Current Prices)		
		2000	1999	1998	2000	1999	1998	2000	1999	1998
45	Construction	131.1	272.2	238.0	115.4	244.8	218.7	26%	41%	35%
	Top 10 Service Industries:									
50	Motor, Sale & Repair	140.2	136.8	175.3	123.4	123.0	161.1	53%	51%	57%
51	Wholesale (excludes motor vehicles)	328.8	388.5	306.8	289.4	349.3	282.0	49%	55%	57%
52	Retailing including repairs	372.5	419.1	430.0	327.9	376.9	395.2	43%	49%	51%
55	Hotels & Restaurants	144.6	139.5	146.6	127.3	125.4	134.8	47%	47%	49%
60	Land Transport^	44.4	57.4	45.9	39.1	51.6	42.2	28%	33%	33%
63	Transport Support, Travel Agents	101.4	65.3	35.5	89.3	58.7	32.7	55%	47%	25%
64	Post & Telecommunications	197.2	174.7	203.9	173.6	157.1	187.4	45%	49%	57%
70	Real Estate Activities	110.4	142.3	69.0	97.2	128.0	63.4	51%	62%	49%
72	Computer and related activities	104.6	147.2	114.5	92.1	132.3	105.2	44%	59%	55%
74	Other business activities	366.6	782.0	647.0	322.7	703.3	594.6	32%	61%	57%
	Total Top 10	1910.8	2452.9	2174.3	1682.0	2205.9	1998.5	43%	54%	53%
	All Market Services#	1848.8	2461.9	2111.0	1627.5	2214.0	1940.3	36%	46%	44%

^ includes road haulage, buses, taxis, rail and pipelines

 # These figures, at face value, imply that about £700m of market services output is conducted with an aggregate operating loss

APPENDIX 10: MARKET SERVICES IN TYNE & WEAR, 1998-2000: NET INVESTMENT

SIC (92)	Industry	Net Investment (Current Prices (£m))			Net Investment (1995 Prices (£m))		
		2000	1999	1998	2000	1999	1998
45	Construction	48.1	15.5	48.1	42.3	13.9	44.2
	Top 10 Service Industries:						
50	Motor, Sale & Repair	21.0	36.4	26.9	18.4	32.7	24.7
51	Wholesale (excludes motor vehicles)	39.4	41.4	62.0	34.7	37.2	57.0
52	Retailing including repairs	137.6	111.3	137.8	121.1	100.1	126.7
55	Hotels & Restaurants	52.4	75.9	70.1	46.1	68.2	64.4
60	Land Transport^	63.8	31.9	31.8	56.2	28.7	29.2
63	Transport Support, Travel Agents	24.3	28.4	79.3	21.4	25.5	72.9
64	Post & Telecommunications	362.5	231.3	222.0	319.1	208.0	204.0
70	Real Estate Activities	-29.8	83.9	51.7	-26.2	75.4	47.5
72	Computer and related activities	35.0	55.6	24.8	30.8	50.0	22.8
74	Other business activities	147.4	357.7	114.7	129.7	321.6	105.4
	Total Top 10	853.5	1,053.8	821.2	751.3	947.6	754.7
	All Market Services	1,175.5	1,443.6	1,033.3	1,034.8	1,298.2	949.7

^ includes road haulage, buses, taxis, rail and pipelines

APPENDIX 11: MARKET SERVICES IN TYNE & WEAR, 1998-2000: NET INVESTMENT PER EMPLOYEE

SIC (92)	Industry	Net Investment per Employee (Current Prices (£))			Net Investment per Employee (1995 Prices (£))		
		2000	1999	1998	2000	1999	1998
45	Construction	2,118.5	626.7	2,091.2	1,864.9	563.6	1,922.0
	Top 10 Service Industries:						
50	Motor, Sale & Repair	2,734.0	4,059.9	2,803.2	2,406.7	3,651.0	2,576.4
51	Wholesale (excludes motor vehicles)	2,360.5	2,502.0	4,913.7	2,077.9	2,250.0	4,516.2
52	Retailing including repairs	2,638.8	2,071.5	2,730.3	2,322.9	1,862.9	2,509.5
55	Hotels & Restaurants	1,946.4	2,701.1	2,713.5	1,713.4	2,429.1	2,494.0
60	Land Transport^	9,065.9	4,636.1	4,659.0	7,980.6	4,169.2	4,282.2
63	Transport Support, Travel Agents	5,148.3	5,693.9	12,212.7	4,531.9	5,120.4	11,224.9
64	Post & Telecommunications	36,307.1	25,641.5	29,297.3	31,960.4	23,058.9	26,927.6
70	Real Estate Activities	-5,875.8	17,803.3	10,098.2	-5,172.4	16,010.1	9,281.4
72	Computer and related activities	6,555.8	12,491.1	5,313.3	5,770.9	11,233.0	4,883.6
74	Other business activities	3,772.0	9,480.2	3,071.0	3,320.5	8,525.4	2,822.7
	Total Top 10	4,887.8	6,017.5	4,930.0	4,302.7	5,411.5	4,531.2
	All Market Services	4,952.2	5,233.4	3,778.6	4,359.4	4,706.3	3,473.0

^ *includes road haulage, buses, taxis, rail and pipelines*

APPENDIX 12: MARKET SERVICES IN TYNE & WEAR, 1998-2000: ESTABLISHMENT SIZE

SIC (92)	Industry	Establishment Size 2000		Establishment Size 1999		Establishment Size 1998	
		Tyne & Wear	UK	Tyne & Wear	UK	Tyne & Wear	UK
45	Construction	11.2	5.7	12.2	5.8	11.5	5.9
	Top 10 Service Industries:						
50	Motor, Sale & Repair	7.2	6.5	8.5	6.6	9.2	6.7
51	Wholesale (excludes motor vehicles)	11.7	8.6	11.4	8.5	8.7	8.4
52	Retailing including repairs	10.2	9.1	10.5	8.9	9.7	8.8
55	Hotels & Restaurants	10.8	10.4	11.6	10.6	10.8	10.4
60	Land Transport^	12.4	10.1	11.8	10.1	11.3	10.0
63	Transport Support, Travel Agents	15.2	14.2	16.3	13.6	21.9	12.3
64	Post & Telecommunications	37.4	23.6	39.6	24.8	37.3	26.8
70	Real Estate Activities	5.5	4.3	5.5	4.3	6.6	4.2
72	Computer and related activities	6.3	3.7	5.4	3.4	6.9	3.5
74	Other business activities	10.2	8.0	10.3	7.9	10.8	8.3
	Total Top 10	10.4	8.3	10.6	7.9	10.4	8.3
	All Market Services	11.5	7.7	13.6	8.7	13.6	8.8

^ *includes road haulage, buses, taxis, rail and pipelines*

APPENDIX 13:

Financial Intermediation Services Indirectly Measured (FISIM) and measuring the contribution of financial services to the economy

I FISIM defined

II Purpose of FISIM. Why do financial services cause problems for statisticians?

III What are the contributions of financial intermediaries to the economy?

IV Levels of FISIM for the North East and UK

V Calculated FISIM per employee in the NE & UK

VI Comments on FISIM in T&W and whether it can be estimated c.f. NE & UK

I. FISIM is defined as that part of the service charges received by financial intermediaries (banks and other deposit taking bodies, excludes insurance companies) which is indistinguishably included within the interest they charge on loans and the interest they pay on deposits. It represents income of the financial sector resulting from differences in interest rates rather than payment for a service and so should not be included within GDP/GVA calculations.

II. The nature of National Accounts is to consolidate intermediate sales between firms (value added method) to avoid the double-counting of output. However, this creates problems when measuring the output of some financial services, namely intermediaries. The 'value added' methodology of ONS National Accounts does not tie in with the balance sheet measurements of earnings made by banks and other depository institutions. The gross value added of the financial intermediation industry is allocated regionally based on data on wages and salaries, whereas FISIM *was* allocated based on numbers of people employed. This inconsistency between allocation methods has been addressed by ONS as it was leading to odd regional results, particularly in 2000 and 2001. The methodology has now been changed so that the regional allocation of FISIM is consistent with that of the financial intermediation industry. Because the data on interest on loans and deposits are not recorded according to sectoral breakdown by the institutions, ONS have to estimate this separately (FISIM).

III. Value added in the National Accounts should be thought of as 'value of sales less intermediate inputs or costs'. In a banking context, the 'suppliers' of a bank's loan book should be seen as its depositors, as the bank utilises customers' capital and uses it to produce loans. However, the bank should also be viewed as providing a service to both its depositors and borrowers, providing depositors with security and access to their money. The output of a financial intermediary should not therefore be measured by the financial products, loans etc it offers, but rather by the service it provides to would-be borrowers and lenders. In calculating the output of financial intermediaries, this is done by deducting their total interest payments from their total receipts of property income (excluding income from investing own funds).

IV. & V.

TWRI has estimated for Tyne & Wear and for Northumberland Financial Intermediation's GVA and FISIM. Figures for other areas are from ONS.

GVA, FISIM and Employees in Financial Intermediaries[§] (FI) 1998-2000			
Area	**1998**	**1999**	**2000**
Tyne & Wear			
Employees in FI Industry (excl. Insurance & Pensions)	7,909	7,559	7,917
*Estimated FISIM for County, £ million	-132.2	-135.1	-164.7
*Estimated GVA of Financial Intermediation, £ million	255	233	242
FISIM as % of FI GVA	51.9%	57.9%	68.1%
Northumberland			
Employees in FI Industry (excl. Insurance & Pensions)	1,126	1,060	1,022
*Estimated FISIM for County, £ million	-18.8	-18.9	-21.3
*Estimated GVA of Financial Intermediation, £ million	36	33	31
FISIM as % of FI GVA	51.9%	57.9%	68.1%
Northumberland & Tyne & Wear			
Employees in FI Industry (excl. Insurance & Pensions)	9,035	8,619	8,939
FISIM, £ million	-151	-154	-186
GVA of Financial Intermediation, £ million	291	266	273
FISIM as % of FI GVA	51.9%	57.9%	68.1%
North East			
Employees in FI Industry (excl. Insurance & Pensions)	14,271	14,022	13,899
FISIM, £ million	-439	-467	-588
GVA of Financial Intermediation, £ million	852	811	867
FISIM as % of FI GVA	51.5%	57.6%	67.8%
UK less Extra-regio			
Employees in FI Industry (excl. Insurance & Pensions)	676,510	712,741	708,491
FISIM, £ million	-27,998	-30,121	-37,949
GVA of Financial Intermediation, £ million	45,313	43,189	45,785
FISIM as % of FI GVA	61.8%	69.7%	82.9%

Source: Regional Gross Value Added (ONS) August 2003 and Sub-Regional Gross Value Added: Methods and Background (ONS) December 2003, ABI Workplace Analysis 1998-2000 (ONS) and TWRI

** Data estimated by TWRI*

§ Includes SIC codes 65.1, 65.2 and 67.1

Note: The allocation of GVA and FISIM estimates to lower level geographies assumes a uniformly distributed contribution rate between each SIC code. Without lower level FISIM and GVA data for each SIC code at the higher level geographies it is not possible to make any assumption about the probable variation in contributions.

VI. The implied calculations of FISIM in Tyne & Wear are TWRI's 'best estimate' using available data. Assuming that 'per employee' data can be used to allocate FISIM at the Tyne & Wear level and assuming that FISIM as a proportion of the total contribution of Financial Intermediation to GVA is constant between NUTS2 and Tyne & Wear levels, the table above attempts to estimate FISIM and Financial Intermediation GVA at this level.

The note in the table above highlights the problem of assuming homogeneous contribution rates across the three SIC categories within Financial Intermediation Services. To clarify, the estimates make the assumption that employees in SIC code 65.1 contribute – think of it as 'productivity' – to GVA and FISIM at the same rate as employees in SIC code 65.2 or 67.1. In all likelihood, the variations in the types of firms and services offered in each of the categories would directly influence the 'productivity' rate of employees within those categories. Without GVA and FISIM data at existing NUTS 1 and NUTS2 levels for each separate SIC code, it is not possible to calculate the 'productivity' in each SIC category, thus making any 'productivity' allocation method, for example at a ratio of 6:3:1, would be completely arbitrary .