J.I.A. 119, I, 115-125

# NOTES ON THE FINANCIAL TIMES-ACTUARIES UNITED KINGDOM EQUITY SHARE INDICES IN 1991

By J. C. H. Brumwell, M.A., F.I.A.

#### ABSTRACT

Continuing process of updating company classifications.

Sixty constituents deleted during 1991—more as a result of casualty rule than those taken over. Only forty eight replaced—reflecting difficulty in finding suitable new non-industrial constituents. No end of the year group changes at the end of the year—for the first time since end-1988.

#### KEYWORDS

FT Actuaries Index; Ordinary Shares; London Market

1. Classification of Stock Exchange Securities by Industry

The original classifications were set out in the 1970 note in this series (*J.I.A.* 97, 111–12). Subsequent amendments were set out in the notes for 1971–74, 1977, 1979–80 and 1983–90 (*J.I.A.* 97, 403; 99, 89; 100, 109; 101, 199; 105, 85; 107, 81; 108, 85; 111, 203; 112, 87; 113, 173; 114, 143; 115, 333; 116, 179; 117, 423 and 118, 173.

At the end of March, category No. 57 (Mail Order Stores) was renamed simply 'Mail Order'. Minor amendments were also made to the definitions of 8 categories.

As a result of the quarterly meetings of the Classification Sub-Committee of the Joint Index Committee, the classifications of 63 companies were altered, following changes in their business, or otherwise corrected. These changes were made only after notification to the company concerned and usually after discussion; 195 companies were approached in 1991 although many of these were concerned with the 1 October and year-end changes explained below.

Late in November, the *Financial Times* reclassified its Share Information Service (the 2 pages preceding the last one) in accordance with FT-Actuaries Share Indices subsections and groups. This provoked some 60 letters from companies which had apparently been unaware of their Stock Exchange classifications. Two-thirds of these were corrected at the year-end and others will be dealt with in 1992.

The Stock Exchange continued to classify the new companies granted a full quotation, or quoted on the Unlisted Securities Market.

A number of changes to the Stock Exchange classification categories were made for 1992. Since it was understood that immediate re-use of the numbers of discontinued categories had created difficulties for certain users at the end of 1990, it was agreed to 'stage' the end of 1991 changes, discontinuing 9 categories

on 1 October, and allowing their numbers to 'lie fallow' for 3 months before 4 new categories were introduced at the end of the year.

The 9 categories discontinued on 1 October 1991 (with their 50 constituent companies being reallocated to the new categories indicated) were:

Discontinued Category	Companies reallocated to
12 Bricks & Roofing Tiles	14 Building Materials
15 Cement & Concrete	14 Building Materials
17 Timber	13 Builders' Merchants
24 Pumps & Valves	22 Industrial Plant
25 Steel & Chemical Plant	22 Industrial Plant
26 Wire & Ropes	23 Mechanical Handling
29 Miscellaneous Engineering Contractors	Various Categories
39 Household Appliances	19 Electricals
40 Kitchen & Tableware	76 Miscellaneous Unclassified

At the same time 2 categories had their names abbreviated:

- 22 'Industrial Plant, Engines & Compressors' became 'Industrial Plant'
- 69 'Office Equipment (excluding Computers)' became 'Office Equipment'.

Changes were also made to the definitions of each of these categories and to 9 others.

The 4 new categories introduced on 2 January 1992 (with their 54 constituent companies being hived out of the categories indicated) were:

New Category	Companies extracted from
30 Education & Business Training	<ul><li>5 75 Support Services, and</li><li>76 Miscellaneous (Unclassified)</li></ul>
36 Computer Software	35 Electronics
39 Health Care	67 Health & Household
40 Personal & Household Care	67 Health & Household

At the same time, two more categories were redefined and retitled:

- 60 'Floor Covering' became 'Carpets'
- 67 'Health & Household' became 'Pharmaceuticals'.

## 2. Constituent changes in the Equity Indices during 1991

A total of 60 constituents were removed from the indices during 1990, 15 less than the previous year. As shown in Table A, only 22 of these constituents were acquired by other companies, 1 was reconstructed, administrators were appointed to 1, there was 1 voluntary liquidation, 32 companies were removed under the casualty rules due to their persisting small capitalisations, and 3 after prolonged suspensions.

On the other hand, in the light of the dearth of new issues, poor standing of smaller companies, and high level of casualties—and the consequent difficulty in

finding new constituents—it was agreed that the relaxation of the 'Normal' casualty rule should continue. This rule requires removal of a company failing to reach a capitalisation of 0.01% of that of the All Share Index at 5 successive quarterly reviews (i.e. over a full calendar year), and it was agreed that this rule should only be implemented if the current capitalisation of a vulnerable constituent was less than two-thirds of the capitalisation of the next replacement constituent. Despite this relaxation, and aided by reduced levels of corporate activity, 1991 was the 1st year in which the number of casualties has exceeded the number taken over.

The number of constituents in the All Share Index has fallen steadily from 750 since 1983—reflecting the difficulty in selecting replacements for constituents removed outside the 500 Share Index. This again proved to be the case in 1991, and the number of constituents, which at the end of 1990 had been 667, fell further to 655 after the year-end changes 12 months later. The 48 new constituents, with their capitalisations on entry, are set out in Table B.

Eleven of the companies reclassified during the year—as described in Section 1—were constituents, and consequently their index classifications were changed as set out in Table C, together with another 5 classified in Stock Exchange category 53 (Printing). On 28 March the mapping of this category was altered from F.T.-A Group 48 (Miscellaneous) to 31 (Packaging & Paper) which was then renamed 'Packaging, Paper and Printing'.

The 19 constituents which changed their names in 1991 are shown in Table D. In 1991 the total number of capital changes (not just those involving changes of constituent) recorded rose by 45 to 1184, just exceeding the previous peak of 1178 reached in 1987. This was before taking into account the 37 required for implementation of changes at the year-end.

# 3. Group changes in the Equity Indices made during 1991

Consideration was given early in the year to the discontinuation of the Textiles subsection index (No. 35) and in December to the Electricals (No. 04) after the take-over of Hawker Siddeley Group, due to their having fallen below 0.5% of the All Share capitalisation, but in each case it was agreed to take no action for the time being. As a result, apart from the change to printing companies—see Section 2—for the first time since 1988, there were no group changes in the FT-Actuaries indices during, or at the end of, 1991.

The mapping to the indices of the 4 new Stock Exchange categories introduced at the beginning of 1992 is:

# S/E Category

- 30 Education & Business Training
- 36 Computer Software
- 39 Health Care
- 40 Personal & Household Care

#### FT-A Subsection

- 41 Business Services
- 05 Electronics
- 27 Health & Household
- 27 Health & Household

#### 4. Secondary Lines

One change was, however, made for 1992, where secondary lines are now treated separately, provided they are both liquid and of material size. Historically, the index has always deemed the entire quoted capital to be priced at the same amount as the equivalent nominal amount of the most/more marketable stock of a company; this was a relic of manual price collection and an attempt to capture a realistic price.

When Beecham Group and SmithKline Beckman merged in 1989, the resultant capital of SmithKline Beecham was approximately equally split between the A shares and Equity Units issued to shareholders of the respective companies, the Equity units each consisting of 5 B shares and a nominal Preference unit which was a device to pay United States' holders their dividends. but where A and B shares were of comparable rights. In theory one Equity Unit should have been priced at 5 times the value of the A shares, and the company was included in the indices on this basis. However, for arbitrage reasons, and the non-inclusion of the Company in the Standard & Poor indices, there has been a steady stream of U.S. sellers, resulting in a permanent discount in the price of the Equity Units to the equivalent 'A' price, often as high as 10% and resulting in over-valuation of the company by sometimes as much as £600 m. It was agreed, therefore, to separate the secondary lines for 1992, where these were marketable and of a sufficient size. Of the 27 index constituents which were found to have a quoted secondary line, 8 were found which fulfilled the necessary criteria, and these are set out in Table F.

#### 5. F.T.-S.E. Indices

The year 1991 was the 8th of operation of the F.T.-S.E. 100 Index—based at 1000·0 at close of business on the last day of trading in 1983—which is calculated on a real-time basis and updated every minute. A description of its calculation was given in the 1984 note in this series.

Details of the 14 changes of constituent made during 1991 are given in Table G and an ordered list of the initial 1992 constituents (i.e. after the year-end changes) in Table H.

During the year an indicative index began to be published for the 30 minutes prior to the official opening at 8.30 am.

The F.T.-S.E. 100 Index also introduced the separate listings of secondary lines for 1992, and two constituents (SmithKline Beecham and Trafalgar House) were affected.

During the year the F.T.-S.E. Eurotrack 100 Index was first published. It is based on the 100 largest Continental companies quoted on SEAQ International, with an algorithm for selection by size within each company based on F.T.-Actuaries World Indices weightings, but otherwise resembling the construction of the F.T.-S.E. 100 Index.

Base date was 26 October 1990, and base value 1000. The basic index is in DM, but it is also calculated in ECU, £, \$ and Yen, the calculation is made every minute from 9.45 am to 3.30 pm.

The F.T.-S.E. 100 (U.K.) and Eurotrack 100 indices were combined with a weighting factor—adjusted quarterly to reflect F.T.-A. World Index weightings—to form the F.T.-S.E. Eurotrack 200 Index which is so constructed to give a real-time Europe-wide Index. In this case the basic index is expressed in ECU, but the index is also calculated in DM, £, \$ and Yen.

#### 6. Miscellaneous

The equity share index values, yields, ratios, capitalisations and weightings at the end of 1991 are set out in Table E.

# Table A—Constituents Removed during 1991

Date of			Control acquired by, or reason
Removal	Constituent Removed	Index Classification	for removal
18 January	Rechem Environmental Services	Chemicals	Shanks & McEwan Group
23 January	STC	Electronics	Northern Telecom
25 February 5 March	Bardon Group Yale & Valor	Building Materials Miscellaneous	Evered Williams Holdings
13 March	Thames Television	Media	Thorn-EMI
19 March	Norfolk House Group	Miscellaneous	Administrators appointed
28 March	Dares Estates	Property	Under Casualty Rule
	Optical & Medical International	Other Industrial Materials	Under Casualty Rule
	Quadrant Group	Leisure	Under Casualty Rule
25 April	Century Oils Group	Oil & Gas	Fuchs (UK)
30 April	Empire Stores	Stores	SA Redoute Catalogue
10 May 15 May	Memec (Memory & Electronic Components) Manpower	Electronics Business Services	Raab Kercher AG
20 May	Tootal Group	Textiles	Manpower Inc Coats Viyella
21 May	Robertson Group	Business Services	Simon Engineering
22 May	Manchester Ship Canal	Transport	Peel Holdings
28 June	Burtonwood Brewery	Brewers & Distillers	Under Casualty Rule
	Cabra Estates	Property	Under Casualty Rule
	Grainger Trust	Property	Under Casualty Rule
	Hall Engineering Holdings	Engineering General	Under Casualty Rule
	Linton Park Merivale Moore	Food Manufacturing Property	Under Casualty Rule
	Pepe Group	Textiles	Under Casualty Rule Under Casualty Rule
	Plaxton Group	Motors	Under Casaulty Rule
24 July	Davy Corporation	Engineering General	Trafalgar House
31 July	Babcock Prebon	Other Financial	Under Casualty Rule
	Brent Walker Group	Hotels & Leisure	Under Casualty Rule
	Clayform Properties	Property	Under Casualty Rule
	First Tokyo Index Trust	Investment Trusts	Adviser (188)
1 August	Speyhawk	Property Other Financial	Under Casualty Rule
22 August	Westpool Investment Trust SD-Scicon	Electronics	London Merchant Securities EDS Electronic Data Systems (City)
20 September	Rockware Group	Packaging Paper & Printing	BTR
1 October	Baggeridge Brick	Building Materials	Under Casualty Rule
	Erskine House Group	Miscellaneous	Under Casualty Rule
	Rutland Trust	Other Financial	Under Casualty Rule
	600 Group	Engineering General	Under Casualty Rule
22 October	Robert M. Douglas (Holdings)	Contracting & Construction	Tilbury Group
1 November	Sovereign Oil & Gas Brown & Jackson	Oil & Gas Stores	Neste Oy
i November	Control Securities	Property	Under Casualty Rule Under Suspension Rule
26 November	Hawker Siddeley Group	Electricals	BTR
2 December	National Home Loans Holdings	Other Financial	Under Casualty Rule
	TVS Entertainment	Media	Under Casualty Rule
5 December	Beazer	Contracting & Construction	Hanson
9 December	Manakin Holdings	Investment Trusts	Voluntary liquidation
16 December	Maxwell Communication Corporation	Media	Under Suspension Rule
	Mirror Group Newspapers	Media	Under Suspension Rule
23 December	Sun Life Corporation Ultramar	Insurance-Life Oil & Gas	Rockleigh Corporation Lasmo
Year End	AB Electronic Products Group	Electronics	Under Casualty Rule
	Acatos & Hutcheson	Food Manufacturing	Under Casualty Rule
	Baltic	Other Financial	Under Casualty Rule
	Brown Shipley Holdings	Merchant Banks	Under Casualty Rule
	Chloride Group	Electricals	Under Casualty Rule
	Emess	Electricals	Under Casualty Rule
	GEI International Markheath	Engineering-General	Under Casualty Rule
	Markneath Trafford Park Estates	Property Property	Under Casualty Rule Under Casualty Rule
	TR Far East Income Trust	Investment Trusts	Under Casualty Rule
	w. wast income itust	investment ilusts	Officer Casualty Rule

# Table B-New constituents during 1991 replacing those removed in Table A

Date of	New Constituent	1.1. 61. 16. 2	Capitalisation
Introduction		Index Classification	$(\mathbf{f}m)$
18 January	ML Laboratories	Health & Household	55-1
23 January	The Hartstone Group	Miscellaneous	55.0
25 February	Domino Printing Sciences	Electronics	48.9
5 March	Charles Baynes	Other Industrial Materials	53.9
13 March	National Power	Electricity (fully paid)	2708-7
19 March	PowerGen	Electricity (fully paid)	1611-4
28 March	BPP Holdings	Miscellaneous	61.3
	FII Group	Miscellaneous	57-1
25 April	Airtours	Hotels & Leisure	66-1
30 April	Johnston Press	Media	55.6
10 May	Resort Hotels	Hotels & Leisure	50.6
15 May	Gardiner Group	Business Services	55-9
	Shires Investment	Investment Trusts	56⋅1
20 May	Mirror Group Newspapers	Media	503.0
21 May	Stat-Plus Group	Packaging Paper & Printing	53-3
22 May	William Sinclair Holdings	Miscellaneous	53.9
28 June	Joseph Holt	Brewers & Distillers	57.6
	Scottish Hydro-Electric	Electricity (fully paid)	960-5
	Scottish Power	Electricity (fully paid)	1988-2
	Sidlaw Group	Oil & Gas	57-1
	Watson & Philip	Food Retailing	109-8
24 July	Eurocamp	Hotels & Leisure	64-4
31 July	Blick	Electricals	57-7
	Lowndes Lambert Group Holdings	Insurance Brokers	71.2
1 August	London Merchant Securities	Property	243.5
22 August	British Polythene Industries	Packaging, Paper & Printing	59-2
16 September	Vodafone Group	Telephone Networks	3333-3
1 October	Betterware Consumer Products	Stores	77.6
	Bitmec Industries	Miscellancous	89.4
	Fleming Emerging Markets Investment Trust	Investment Trusts	60.6
	Hi-Tec Sports	Leisure	71.0
22 October	Jeyes Group	Health & Household	64-0
-2 0 010001	Porter Chadburn	Conglomerates	63.2
1 November	Claremont Garments (Holdings)	Textiles	61.2
8 November	JIB Group	Insurance Brokers	238-1
26 November	Davies & Newman Holdings	Transport	100.8
2 December	Burn Stewart Distillers	Brewers & Distillers	87.2
	Domestic & General Group	Insurance—Composite	27.2
	Warner Howard Group	Business Services	61.9
16 December	Sage Group	Electronics	63.2
To December	Seton Healthcare Group	Health & Household	56.8
23 December	British-Borneo Petroleum Syndicate	Oil & Gas	90.9
Year-End	Bromsgrove Industries	Metal & Metal-Forming	56.1
. car-pua	Burford Holdings	Property	60.2
	CRT Group	Business Services	72·6
	Frost Group	Miscellaneous	56.3
	Serco Group	Business Services	62·1
	Reg Vardy	Motors	61:6
	ing raidy		0.0

## Table C-Constituents reclassified during 1991

Date of Reclassification	Company	Former Classification	New Classification
28 March	Godfrey Davis (Holdings)	Conglomerates	Business Services
	De La Rue	Miscellaneous	Packaging Paper & Printing
	Hays	Transport	Business Services
	Microfilm Reprographics	Miscellaneous	Packaging Paper & Printing
	Microgen Holdings	Miscellaneous	Packaging Paper & Printing
	Saint Ives	Miscellaneous	Packaging Paper & Printing
	Securicor Group	Business Services	Telephone Networks
	Wace Group	Miscellaneous	Packaging Paper & Printing
28 June	Scholl	Stores	Health & Household
see footnote	Racal Electronics	Telephone Networks	Electronics
1 October	Henry Barrett Group	Engineering—General	Metals & Metal-Forming
Year-End	Barry Wehmiller International	Other Industrial Materials	Engineering-General
	Blick	Electricals	Electronics
	BPP Holdings	Miscellaneous	Business Services
	Close Brothers Group	Other Financial	Merchant Banks

Note: Racal Electronics (Telephone Networks) was removed from the indices on its demerger of Vodafone Group on 16 September and reinstated on 20 September-reclassified Electronics.

# Table D-Name changes during 1991

Former Name	New Name
Abingworth	Manakin Holdings
American Business Systems	Danka Business Systems
Camellia Investments	Camellia
Godfrey Davis (Holdings)	Davis Service Group
Evered	Evered Bardon
F & C Smaller Companies	Foreign & Colonial Smaller Companies
F & C Pacific Investment Trust	Foreign & Colonial Pacific Investment Trust
Greenall, Whitley	Greenalls Group
Greene King & Sons	Greene King
Markheath Securities	Markheath
Oxford Instruments Group	Oxford Investments
Portals Holdings	Portals Group
Scottish & Newcastle Breweries	Scottish & Newcastle
Systems Reliability Holdings	Enterprise Computer Holdings
Tilbury Group	Tilbury Douglas
Trusthouse Forte	Forte
United Friendly Insurance	United Friendly Group
Wiggins Teape Appleton	Arjo Wiggins Appleton
Willis Corroon	Willis Corroon Group

# Table E-Equity Index Levels etc. on 31 December 1991

Table F-Secondary Lines introduced at the end of 1991

Company	Main Line-Formerly Listed Alone	Secondary Line to be Listed in 1992
Daily Mail & General Trust	'A' Ordinary Non-voting	Ordinary
Gestetner Holdings	Ordinary	Ordinary Capital
Hammerson Property Investment		•
& Development Corporation	'A' Ordinary (Limited Voting)	Ordinary
John Laing	Ordinary 'A' (Non-Voting)	Ordinary
London Merchant Securities	Ordinary	Deferred
Paterson Zochonis	'A' (Non-Voting) Ordinary	Ordinary
SmithKline Beecham	'A' Ordinary	Beckman Corpn Equity Units
Trafalgar House	Ordinary	'A' Ordinary

# Table G-Changes in FT-SE 100 Constituents during 1991

These changes were made after the close of business on the date indicated:

Date	Deleted	Capitalisation (£m)	Added	Capitalisation (£m)
22 January	STC	1828	Tate & Lyle	951
28 March	Burmah-Castrol	1063	National Power (fpd)	2615
	Dalgety	846	PowerGen (fpd)	1593
	GKN	971	Williams Holdings	1277
28 June	Hammerson Property		Inchcape	1246
	Inv. & Development	988	-	
	Harrisons & Crosfield	917	Rentokil Group	. 1249
	Ranks Hovis McDougall	958	Scottish Power (fpd)	2009
13 September	Racal Electronics	3227	Vodafone Group	3328
30 September	Ultramar	872	Northern Foods	1209
25 November	Hawker Siddeley Group	1427	NFC	1281
3 December	Maxwell Communication	228	W H Smith Group	1244
31 December	Asda Group	769	Laporte	1078
	BICC	838	MB-Caradon	1191
	Lucas Industries	866	Tomkins	1134

Table H—Constituents of the F.T.-S.E. 100 Index immediately after the 31 December 1991 changes (with capitalisation on that day)

		Equity Market Value			Equity Market Values
Position	Company	$(\ell m)$	Position	Company	(£m)
1	Glaxo Holdings	25626	51	General Accident	1990
2	British Telecommunications	20232	52	Scottish Power (fully paid)	1981
3	'Shell' Transport & Trading	16509	53	Arjo Wiggins Appleton	1964
4	British Petroleum	15772	54	Whitbread	1913
5	SmithKline Beecham	11546	55	Pearson	1900
6	British Gas	11294	56	United Biscuits (Holdings)	1887
7	Guinness	9906	57	Forte	1836
8	Hanson	9614	58	Rank Organisation	1815
9	Wellcome	9447	59	Legal & General Group	1808
10	BAT Industries	9268	60	PowerGen (fully paid)	1800
11	Grand Metropolitan	8903	61	TSB Group	1791
12	Imperial Chemical Industries	8600	62	Scottish & Newcastle	1702
13	BTR	7994	63	Midland Bank	1688
14	Marks & Spencer	7606	64	British Airways	1677
15	Unilever	7257	65	Lasmo	1624
16 17	J Sainsbury	6596	66	BET	1539
	Cable & Wireless	6371	67	Redland	1488
18 19	Barclays	6033	68	Inchcape	1476
20	General Electric Allied-Lyons	5410 5404	69 70	Rentokil Group	1465
21		4909		Scars	1422
21	Lloyds Bank		71 72	Smith & Nephew	1398
23	RTZ Corporation Prudential Corporation	4706 4595	72 73	British Steel	1370
24	National Westminster Bank	4593 4501	73 74	Tate & Lyle	1370
25	Reuters Holdings	4501 4497	74 75	Williams Holdings	1368
26	Tesco	4392	76	Bank of Scotland Northern Foods	1331 1293
27	Boots	4251	77	MEPC	1293
28	Bass	4246	78	NFC (Variable Voting)	1270
29	Abbey National	3858	79	Thames Water	1260
30	Vodafone Group	3780	80	Royal Bank of Scotland Group	1235
31	Great Universal Stores 'A'	3495	81	Blue Circle Industries	1223
32	Rothmans International 'B'	3338	82	Rolls-Royce	1218
33	Argyll Group	3091	83	British Acrospace	1203
34	Cadbury Schweppes	3026	84	W H Smith Group 'A'	1193
35	Reed International	2949	85	MB-Caradon	1191
36	BOC Group	2871	86	North West Water Group	1189
37	National Power (fully paid)	2805	87	Royal Insurance Holdings	1164
38	BAA	2668	88	Hillsdown Holdings	1137
39	Ladbroke Group	2500	89	Tomkins	1134
40	Reckitt & Colman	2406	90	Severn Trent	1101
41	Peninsular & Oriental Steam Navigation	2394	91	Eurotunnel (plc + SA: 50% capn)	1091
42	Thorn EMI	2343	92	Laporte	1078
43	Kingfisher	2321	93	Pilkington	1065
44	Sun Alliance Group	2293	94	RMC Group	1050
45	Land Securities	2262	95	Lonrho	1020
46	Fisons	2249	96	Willis Corroon Group	1019
47	Commercial Union	2119	97	Trafalgar House	1003
48	Associated British Foods	2117	98	Anglian Water	974
49	Courtaulds	2013	99	Guardian Royal Exchange	959
50	Enterprise Oil	2002	100	Tarmac	842