The profitability of UK industrial sectors

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Introduction

Previous articles in the *Bulletin*[1] on the profitability of industrial and commercial companies in the United Kingdom have shown that:

- a gradual decline in real profitability during the 1960s and 1970s was followed by a sharp decline in the mid-1970s;
- real profitability has improved slightly since 1975; and
- real profitability has increasingly diverged from profitability as measured in companies' published accounts.

These findings hold good whether the focus of attention is profits as a share of income, the rate of return on total trading assets, or the return on the equity interest in trading assets.

These trends have been identified at the aggregate level, using both national accounts and company accounts data. This article[2] extends the analysis to eight individual sectors of UK industry (six in manufacturing, and two in distribution and services) identified within an aggregate sample of the accounts of over 1,000 large listed companies.[3] The Department of Industry (D.o.I.), which publishes the summaries of aggregated published accounts in *Business Monitor MA3: Company Finance*, allocates companies by industry according to their principal activity. Some degree of caution is, however, called for in interpreting trends in UK profitability at the level of disaggregation presented in this article, largely because of the inclusion of secondary activities in other sectors arising from the diversification of many large companies,[4] and of the assets and profits of overseas activities.

After comparing the levels of, and trends in, recorded pre-tax rates of return on trading assets in each sector, this article examines differences between sectors in the size of the adjustments to reported profits needed to obtain inflationadjusted profits, and presents estimates of real rates of return on total trading assets. Finally, real rates of return to the equity interest, calculated in accordance with the Accounting Standards Committee's Exposure Draft 24 (ED24),[5] are contrasted for each sector with recorded rates of return on equity.

- [1] June 1976 page 36, December 1978 page 513 and June 1979 page 183.
- [2] Assistance with the interpretation and provision of statistical material has been kindly given by the Department of Industry.
- [3] Detailed figures showing recorded and real pre-tax rates of return on trading assets, and recorded and real (ED24) rates of return on equity for major industrial groupings in each year from 1961 to 1977 are set out in Tables E-H. Profitability trends for narrower industrial groupings will be reported in a *Discussion Paper* by N. P. Williams to be published early in 1980.
- [4] The characteristics of the Business Monitor sample of companies are set out in an appendix. The sectoral breakdown in this article conforms with that presented by the D.o.I. in a series of annual articles in Trade and Industry (the latest being 'Companies' rates of return on capital employed, 1960 to 1978', 28th September 1979, page 631).
- [5] ED24: Current Cost Accounting (published by the Accounting Standards Committee, April 1979).

Table ARecorded and historic cost pre-taxrates of return on total tradingassets in manufacturing

	Recorded rate of return	Historic cost rate of return			
1961-65	13.1	13.8			
1966-70	12.1	13.1			
1971-74	15.6	17.2			
1975-77	17.2	20.0			

Chart A

Recorded pre-tax rate of return on trading assets: manufacturing industry, and distribution and services



The main conclusion is that, although not surprisingly levels of profitability vary quite markedly between sectors, the downward trend in real profitability observed at the aggregate level during the 1960s and the early 1970s, and the recent fall to a very low level, are common to all of the industrial groupings presented in this article.[1] This finding applies to real rates of return on both trading assets and equity.

Returns on trading assets

Recorded pre-tax rates of return on trading assets

The previous articles have drawn attention to the comparative stability of the historic cost rate of return on trading assets[2] during the 1960s and 1970s. Published accounts have typically incorporated some provisions for the revaluation of fixed assets, more especially during the 1970s, and do not therefore provide a 'true' measure of the historic cost rate of return. Table A shows that 'recorded' rates of return[3] in manufacturing have been lower than, and diverged increasingly from, estimates of historic cost rates of return, reflecting the impact of asset revaluations on operating surpluses (through higher depreciation charges) and on the capital stock.

For the total of manufacturing, distribution and service companies included in the sample, recorded rates of return from 1961 to about 1971 showed no clear trend. Such fluctuations as there were-between 12% and 15%-were broadly in keeping with cycles in economic activity. During that period, recorded rates of return in distribution and services were consistently higher than those in manufacturing. Recorded rates of return on trading assets have subsequently risen (particularly sharply in manufacturing) to an average of about 17% since 1972 (see Chart A). There are, however, marked differences between sectors in the levels of, and trends in, recorded profitability, and also in the relative profitability of sectors over time. The average recorded rate of return of 171/2% for all companies in 1977 encompassed a range from about 131/2% in textiles and allied industries to 19% in retail distribution. There have been clear differences among sectors in the trend of recorded profitability in the 1960s and 1970s; the increase in chemicals from just over 10% in the 1960s to over 20% in 1974 is in marked contrast to the comparative stability of recorded profitability in textiles and allied industries.

Inflation adjustment of the Business Monitor sample

As shown in earlier articles, historic or recorded profits on total trading assets have in general failed in recent years to provide an adequate measure of the operating surplus available for interest, dividend and tax payments, because insufficient provision has normally been made in companies' accounts to maintain the substance of the business in an inflationary period. Thus, the following adjustments to the

 There seem to be a few exceptions (for instance electrical engineering) to this general rule at a finer level of disaggregation, though at this level even greater caution is called for in interpreting the figures.

[2] Using the national accounts and referring to non-North Sea industrial and commercial companies.
[3] Measured as gross trading profits (less charges for the hire of plant and machinery), net of book value depreciation, as a percentage of net tangible fixed assets and stocks (both at book value) and net trade credit extended. Two points relating to this definition should be noted. First, the national accounts estimates of rates of return quoted in the previous articles exclude net trade credit exclused. Two points relating to this definition should be noted. First, the national accounts estimates of rates of return quoted in the previous articles exclude net trade credit from trading assets differ because the D o.I. Includes in its definition of trading assets differ because the D o.I. Includes in its definition of trading assets (in addition to those items outlined above) cash, Treasury bills, tax reserve certificates and tax payable next year; the D.o.I. definition of trading income is correspondingly wider. In addition, differences between the estimates of real rates of return presented by the Bank and the D.o.I. reflect the inclusion by the Bank, but not by the D.o.I. of a monetary working capital adjustment in estimates of real return or small differences of datal between the methods of adjusting company accounts for inflation. Full details of the method of adjustment for inflation used here will be set out in the forthcoming *Discussion Paper*.

Table B Composition of recorded profits: manufacturing 1961–1977

Per cer	it				
	Real profits	Stock appreciation	Depreciation adjustment[a]	Monetary working capital adjustment	
1961	87.0	3.4	7.4	2.2	
1902	86.0	51	7.0	0.9	
1964	82.6	87	6.3	2.4	
1965	82.4	7.9	7.4	2.3	
1966 1967	81.1 86.1	8.0 5.0	8.7 7.2	2.2 1.7	
1908	74.0	11.9	0.9	3.0	
1970	62.6	21.3	12.2	3.9	
1971 1972 1973 1974 1975	63.3 64.8 44.7 19.2 16.5	18.7 17.3 37.9 58.7 53.0	15.4 14.6 14.5 19.8 30.8	2.5 3.3 3.0 2.4 -0.3	
1976 1977	29.9 44.7	43.2 27.1	27.9 28.9	-1.0 -0.7	

[a] The adjustment of depreciation from a recorded to a current valuation.

Table C

Composition of recorded profits: 1974–1977

reitent				
	Real profits	Stock appreciation	Depreciation adjustment[a]	Monetary working capital adjustment
Manufacturing of which: Food drink and	27.6	45.5	26.9	0.1
tobacco	44.5	39.7	19.5	-3.6
Chemicals and allied				
industries	29.1	34.9	28.5	7.6
Metal manufacture Engineering, ship- building, vehicles and other metal	- 3.7	62.2	32.5	9.1
goods Textiles, leather, clothing and	25.0	59.5	21.6	-6.1
footwear	16.9	49.5	:34.0	-0.3
Other manufacturing	29.0	38.5	25.4	7.1
Distribution and				
services of which: Wholesale	57.1	33.9	15.3	-6.2
distribution	43.4	46.8	10.7	-0.9
Retail distribution	65.6	26.6	10.8	-2.9

[a] The adjustment of depreciation from a recorded to a current valuation.

Chart B

The relationship between current cost, recorded and historic cost measures of net fixed assets: manufacturing industry



operating surplus on total trading assets need to be made to reported accounts:

- (i) the deduction of stock appreciation (the 'cost-of-sales adjustment');
- (ii) the deduction of current cost, rather than recorded, depreciation; and
- (iii) the deduction of an amount representing the erosion of the real value of monetary working capital[1] (the 'monetary working capital adjustment').

The adjustments in the balance sheet corresponding to (i) and (ii) entail the valuation of tangible assets (both fixed capital and stocks) on a current cost basis.[2] The adjustments listed above are those proposed in ED24. Accordingly, the stock appreciation, depreciation and fixed-asset adjustments incorporate—so far as available data permit—the physical asset price indices specific to each individual sector. The monetary working capital adjustment is based on the retail price index.

For the manufacturing sector as a whole, the implications of these adjustments to secure a measure of real operating surpluses are illustrated in Table B. The share of real profits in recorded profits fell sharply in the mid-1970s, and, although there was subsequently some recovery, by 1977 it was still only about one half of what it had been in the early 1960s. In the mid-1970s, stock appreciation accounted for over 50% of recorded profits. The share of the depreciation adjustment (the difference between recorded and replacement cost depreciation) in recorded profits in manufacturing has risen to about 30% in recent years, as cumulative inflation has increased over the lives of assets on companies' balance sheets. The monetary working capital adjustment has been negligible in quantitative terms because net trade credit extended by manufacturing industry as a whole has been small. Real profits have tended to represent a higher proportion of recorded profits in distribution and services than in manufacturing (see Table C).

Chart B shows that revaluations to fixed assets in companies' balance sheets have been more prominent since 1972, but recorded valuations of fixed assets have, nevertheless, diverged increasingly from current valuations. By 1977, the current value of net fixed assets in manufacturing exceeded the recorded value by about 60%.

Real pre-tax rates of return on trading assets

Real pre-tax rates of return on total trading assets have been consistently higher in the distribution and services sector than in manufacturing industry (see Table D).[3] In manufacturing, real profitability during the 1960s and early 1970s displayed a much more marked downward trend than in distribution and services and was also subject to rather more cyclical variation. The sharp fall of profitability in the mid-1970s was common to both manufacturing and distribution and services, but the recovery in real profits since 1975 seems to have been confined to manufacturing, albeit from a very low base.

 Measured as net trade credit extended. This adjustment is necessary in deriving the real operating surplus, and the real return on total trading assets, because of the inclusion of net trade credit extended in the measure of trading assets.

(2) While stocks should, in principle, be converted from book value to current cost, the stock-turnover period is generally short, so that even in years of comparatively rapid inflation mid-year estimates of current and book valuations of stocks do not diverge appreciably. Accordingly, the measure of current cost capital employed in this article includes the book value of stocks so as to preserve an element of consistency with the national accounts estimates of profitability.

[3] This largely reflects the strikingly high level of real profitability in retail distribution (see Table F).

Table D

Per cent

Real pre-tax rates of return on trading assets: manufacturing, and distribution and services

	Manufacturing	Distribution and services[a]
1961 1962 1963	10.6 9.7 10.3	13.9 14.1 13.8 13.8
1965	10.8	13.8
1966	8.9	13.2
1967	9.5	13.1
1968	9.7	12.9
1969	8.6	12.3
1970	6.6	11.3
1971	7.0	12.6
1972	8.4	13.8
1973	6.8	11.7
1974	2.7	7.0
1975	1.9	7.7
1976	4.3 -	7.9
1977	5.9	7.7

[a] Construction, transport and communication (excluding shipping), wholesale distribution, retail distribution and miscellaneous services.

Chart C Real pre-tax rates of return on trading assets in sectors of manufacturing



The real rates of return on trading assets of the industrial sectors presented in this article have varied considerably during the 1960s and 1970s (see Chart C). In 1977, for example, real rates of return on trading assets ranged from 3% in textiles and allied industries to 10% in retail distribution. Within each of the groupings shown here, the relative disparity of rates of return seems to have been even greater, though, for the reasons cited earlier, these figures need to be interpreted with greater caution. Even so, it seems that, within the group engineering and allied industries, vehicles and shipbuilding have sustained losses in real terms in recent years. The downward trend in real profitability during the last two decades has been less pronounced in some sectors (for instance, chemicals and wholesale distribution) than in others (for instance, textiles) as can be seen in Chart C.

In the December 1978 *Bulletin* article, an attempt was made to identify the main factors bearing on the development of aggregate profitability during the last two decades. Chief among these factors were the change in labour and material input costs, and the level of capacity utilisation. The tentative results of a replication of that exercise for a number of industrial sectors indicate that changes in current input costs made a significant contribution to the explanation of changes in real rates of return on total trading assets. In other words, an acceleration in these costs has resulted in a fall in the real rate of return. One likely cause is that the convention of historic cost pricing has remained fairly prevalent, notwithstanding the sharp increase in cost inflation since 1973.

For the sectors presented here, the differences between the recorded and historic cost rates of return suggest that in some cases a move, but only a partial move, towards current cost pricing has occurred in recent years. For example, in the chemicals and allied industries sector, where cost pressures were particularly intensified by higher oil prices[1] in the mid-1970s (costs rose by over 30% in 1974 and 1975), the fall in real profitability was more modest than in other industries. This resulted from an increase in recorded profit margins: the recorded rate of return on trading assets rose from just over 10% in the 1960s to over 20% in 1974.

Generally, however, market competition (particularly from imports), and an adherence to accounting practices which do not show the full extent to which inflation reduces real profits relative to recorded profits, have tended to militate against a widening of recorded profit margins sufficiently to maintain real rates of return.

Returns on equity

Recorded pre-tax rates of return on equity

While pre-tax rates of return on total trading assets provide an indication of the ability to maintain a given level of real assets and activity, shareholders and the stock market are likely to be more interested in the profits attributable to the equity interest. Recorded rates of return on equity are derived from recorded rates of return on trading assets by deducting net interest payments from the stream of profits, and net monetary liabilities from the measure of capital employed.

[1] The impact of the acute cost pressures in the chemicals sector was mitigated to only a small extent by demand conditions which were rather more favourable than for manufacturing as a whole.





The recorded rates of return on total trading assets have, with few exceptions,[1] exceeded nominal returns earned by debtholders[2] throughout the 1960s and 1970s. For most sectors, and for all of the groupings reported here, the recorded rates of return to the equity interest have, therefore, exceeded the recorded rates of return on total trading assets. Indeed, the divergence between these two measures of recorded rates of return has tended to widen in the 1970s. Overall, the divergence between recorded rates of return on equity and trading assets has perhaps not surprisingly tended to be greater at higher levels of gearing in recorded terms.[3]

Real pre-tax rates of return on equity

The derivation of real equity profits from recorded equity profits involves not only the deduction of stock appreciation, depreciation and monetary working capital adjustments from recorded equity profits, but also the attribution to profits of the fall in the real value of debt resulting from general inflation (a 'gearing adjustment').[4]

The extent to which recorded and real rates of return on equity diverge is shown in Chart D. This divergence has increased markedly during the 1970s and, more significantly perhaps from the point of view of the allocative function of the capital market, the extent of the divergence has differed from sector to sector. For the more highly geared sectors, it is to be expected that real equity returns have been relatively, though not absolutely, higher than recorded equity returns. But this feature has tended to be outweighed by the differences among sectors in the extent to which the prior current cost adjustments have impinged on recorded equity profits. The distribution and services sector has out-performed manufacturing industry to a greater extent in terms of real equity profitability than in terms of recorded equity profitability.

Conclusions

This article has indicated significant differences during the last two decades in the levels of real profitability in a number of sectors of industry. Real rates of return on trading assets seem to have remained higher in distribution and service industries than in manufacturing. Indeed, some sectors of manufacturing (such as metal manufacture, textiles and, within the engineering sector, shipbuilding and vehicles) appear to have sustained losses in real terms in some recent years, while elsewhere (e.g. in retail distribution) real rates of return have been of the order of 10%. The downward trend in aggregate real profitability in the 1960s and early 1970s, followed by a sharp decline in the mid-1970s and by a modest recovery in recent years, appears to have been fairly widespread among the sectors considered in this article. The importance of changes in cost inflation as a factor accounting for changes in real profitability seems also to have been fairly widespread, suggesting that historic cost pricing has remained prevalent

- [3] Net monetary liabilities. excluding net trade credit extended, as a percentage of the recorded valuation of total trading assets.
 - 4] The ED24 proposals suggest that the gearing adjustment should be on a realisations basis (with the exception of the monetary working capital adjustment on net trade credit extended, which—as calculated in deriving real returns on trading assets—should be calculated an an accruals basis). The gearing adjustment proposed in ED24 is calculated as the geared portion (that part of the replacement valuation of total trading assets financed by net debt, excluding net trade credit) of the stock appreciation, depreciation and monetary working capital adjustments.

The outstanding exceptions are the shipbuilding and vehicles sectors (part of the engineering and allied industries grouping).

^[2] Nominal returns earned by debt-holders have, in recent years, been below current interest rates because of the continuing—although declining—share of fixed-rate debt (incurred when interest rates were lower) within the total of outstanding debt.

throughout much of industry. Even so, in some cases (for instance, in the chemicals industry) real rates of return seem to have been relatively well sustained in spite of acute cost pressures.

In the context of stock market behaviour, the returns on the equity interest are more relevant than returns on total trading assets. A downward trend in real rates of return on the equity interest, calculated in accordance with the proposals of ED24, is common to most sectors. The divergence of real from recorded rates of return on equity has increased, implying that undue concentration on recorded equity profits may have misled employers, employees and the stock market as to the real profitability of UK companies. In addition, the allocative function of the stock market may have been distorted by the varying extent to which recorded and real equity profitability have diverged in different sectors.

Table E

Recorded pre-tax rates of return on total trading assets

	Manufacturing, distribution and services	Manufacturing	of which:	20.00		Distribution	of which:				
			Food, drink and tobacco	Chemicals and allied industries	Metal manu- facture	Engineering, shipbuilding, vehicles and other metal goods	Textiles, leather, clothing and footwear	Other manufac- turing[a]	services[b]	Wholesale distribution	Retail distribution
1961	13.8	13.3	14.8	11.4	12.4	12.7	13.4	15.3	16.4	13.0	19.1
1962	12.5	11.8	14.4	10.8	8.2	11.7	11.2	13.7	16.3	12.1	19.4
1963	13.3	12.8	14.9	12.2	8.0	13.7	12.4	14.3	16.0	13.3	17.6
1964	15.0	14.1	14.8	13.5	10.5	13.5	13.7	16.3	16.5	14.6	18.4
1965	13.8	13.3	14.1	12.6	10.2	13.5	14.0	15.2	16.0	14.3	18.0
1966	12.3	11.7	13.0	10.9	7.3	12.3	11.8	13.2	14.9	12.8	17.3
1967	12.2	11.7	12.6	11.3	10.2	11.3	11.7	13.0	14.7	12.1	16.7
1968	13.7	13.2	13.2	13.5	11.3	13.0	13.9	14.0	15.5	13.7	17.7
1969	13.1	12.5	12.6	12.8	12.5	12.8	12.4	12.2	15.3	13.5	16.7
1970	12.4	11.6	12.7	10.9	9.9	11.8	11.1	11.8	15.5	15.1	17.6
1971	13.6	12.7	14.0	10.7	9.4	13.4	12.6	13.4	16.8	15.0	19.8
1972	16.0	15.0	16.0	12.2	10.8	15.5	15.7	16.4	18.6	17.2	22.6
1973	18.1	17.8	17.5	17.5	16.2	17.7	19.4	18.3	19.2	20.4	21.0
1974	16.8	17.0	15.3	21.9	15.4	16.4	16.1	16.9	16.4	19.0	18.2
1975	15.4	15.2	17.4	16.9	11.9	15.0	9.9	14.1	15.9	16.7	18.6
1976	18.6	18.9	20.0	19.5	14.4	20.3	14.5	17.6	17.7	18.6	19.3
1977	17.7	17.6	16.9	18.2	13.7	17.9	13.3	16.8	17.3	17.1	19.0

[a] Bricks, pottery, glass, cement, etc.; timber, furniture, etc.; paper, printing and publishing; and other manufacturing industries.

[b] See footnote [a] to Table D.

Table F

Per cent

Real pre-tax rates of return on total trading assets

	Manufacturing, distribution and services	Manufacturing	of which:			Distribution	of which:				
			Food. drink and tobacco	Chemicals and allied industries	Metal manu- facture	Engineering, shipbuilding, vehicles and other metal goods	Textiles, leather, clothing and footwear	Other manufac- turing[a]	and services[b]	Wholesale distribution	Retail distribution
1961	11.4	10.6	11.0	10.3	8.8	10.1	11.1	12.2	13.9	11.0	18.4
1962	10.7	9.7	11.0	9.8	5.9	9.7	9.4	11.4	14.1	10.7	18.7
1963	11.2	10.3	10.4	10.2	5.4	12.1	9.3	11.8	13.8	11.5	17.1
1964	12.2	10.8	11.1	12.0	6.5	9.2	12.2	12.9	13.8	11.2	17.8
1965	11.2	10.2	10.4	11.3	6.4	9.9	11.4	12 2	13.8	11.7	18.3
1966	10.0	8.9	9.8	9.4	4.2	9.1	10.2	10.6	13.2	10.7	17.8
1967	10.4	9.5	10.3	9.1	6.9	9.4	11.0	11.0	13.1	9.7	17.7
1968	10.6	9.7	9.6	11.3	6.6	9.3	10.4	10.6	12.9	10.4	16.5
1969	9.6	8.6	8.8	10.6	4.5	8.1	9.7	8.6	12.3	10.2	14.8
1970	7.7	6.6	8.3	5.8	4.1	6.2	7.2	6.9	11.3	9.9	14.2
1971	8.5	7.0	8.8	5.0	4.5	7.4	6.7	7.3	12.6	9.8	16.4
1972	9.9	8.4	9.9	6.7	4.1	9.1	5.1	9.9	13.8	10.9	20.0
1973	8.1	6.8	7.3	5.0	1.3	7.2	6.5	8.0	11.7	8.0	17.6
1974	3.8	2.7	4.3	3.1	-2.3	1.5	5.0	2.1	7.0	6.3	9.2
1975	3.7	1.9	4.0	2.0	-0.8	2.0	0.5	2.7	7.7	7.4	10.3
1976	5.3	4.3	7.5	4.2	-2.2	5.9	- 0.4	4.4	7.9	5.4	10.0
1977	6.6	5.9	6.2	7.7	3.5	6.2	2.9	5.8	7.7	8.1	9.7

[a] See footnote [a] to Table E.
[b] See footnote [a] to Table D.

Table G

Recorded pre-tax rates of return on equity

Per cent											
	Manufacturing,	Manufacturing	of which:	1992			Distribution of which:				
	and services		Food, drink and tobacco	Chemicals and allied industries	Metal manu- facture	Engineering, shipbuilding, vehicles and other metal goods	Textiles, leather, clothing and footwear	Other manufac- turing[a]	services[b]	Wholesale distribution	Retail distribution
1961 1962 1963 1964 1965	15.8 14.5 15.5 17.6 17.0	15.2 13.7 14.9 16.6 15.7	18.2 17.8 18.5 18.5 18.5 17.9	13.2 12.5 14.4 15.9 14.5	14.5 9.6 9.1 12.3 12.0	14.3 13.3 15.9 15.7 15.6	14.8 12.5 14.3 15.6 16.1	17.3 15.8 16.6 19.1 17.7	18.8 18.8 18.7 19.1 18.3	14.8 13.9 15.8 17.6 16.8	21.2 21.6 20.0 20.9 20.7
1966 1967 1968 1969 1970	15.2 15.4 18.0 17.8 15.9	13.7 14.0 16.3 15.7 14.7	15.2 15.4 16.6 16.3 16.5	12.6 13.3 17.0 16.6 13.9	8.1 11.7 13.2 15.4 12.2	14.3 13.4 16.0 15.8 14.9	13.6 13.8 17.4 15.5 13.6	15.5 15.7 17.3 15.3 14.7	16.8 17.3 18.7 19.2 20.3	14.9 14.1 16.6 16.6 19.4	19.8 19.4 21.4 21.1 22.7
1971 1972 1973 1974 1975	17.6 21.1 23.7 20.8 18.2	16.3 19.7 23.1 21.1 17.9	18.3 21.5 23.3 19.0 21.4	13.9 16.4 24.0 29.9 21.8	11.3 13.5 21.7 19.5 13.2	17.0 19.8 21.8 19.3 16.7	15.9 20.1 25.0 19.6 10.4	17.1 21.4 23.9 20.6 16.3	22.1 25.0 25.5 20.1 18.8	19.7 23.5 27.6 23.0 19.8	25.4 28.6 26.2 21.8 21.6
1976 1977	22.6 21.3	22.9 20.8	24.7 20.0	24.8 23.1	16.9 15.7	23.8 19.4	16.7 14.2	21.2 20.2	21.5 21.2	23.2 21.1	22.4 21.9

[a] See footnote [a] to Table E.[b] See footnote [a] to Table D.

Table H

Real pre-tax rates of return on equity

Pe	r	ce	nt	
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	Manufacturing,	Manufacturing	of which:			and the second	12- 13 G	100 S 1000	Distribution	of which:	
	and services		Food, drink and tobacco	Chemicals and allied industries	Metal manu- facture	Engineering, shipbuilding, vehicles and other metal goods	Textiles, leather, clothing and footwear	Other manufac- turing[a]	and serviccs[b]	Wholesale distribution	Retail distribution
61	13.1	12.2	13.2	12.1	10.2	11.7	12.2	13.8	15.8	12.7	20.5
62	12.4	11.3	13.3	11.4	6.7	11.3	10.5	13.0	16.2	12.5	20.9
63	13.2	12.1	12.9	12.2	6.0	14.2	11.0	13.6	16.1	13.7	19.5
64	14.5	12.9	13.6	14.3	7.6	11.3	13.9	15.2	16.2	13.9	20.6
65	14.1	12.3	13.2	13.3	7.5	12.1	13.3	14.4	16.0	14.0	21.6
66	12.8	10.6	11.5	11.1	4.6	11.2	11.8	12.6	15.0	12.7	21.0
67	13.5	11.6	12.5	11.0	8.0	11.4	13.1	13.3	15.7	11.6	21.2
68	14.7	12.4	12.3	14.7	7.9	12.1	13.7	13.6	16.1	13.3	20.8
69	14.0	11.4	11.5	14.1	6.5	11.0	12.6	11.2	15.8	13.4	19.4
70	10.5	8.9	10.7	8.1	5.4	8.8	9.0	9.0	15.2	13.4	18.9
71	11.4	9.5	11.3	7.2	5.4	10.1	8.9	9.8	16.7	13.8	21.5
72	13.8	11.7	12.9	9.6	5.3	12.5	8.1	13.4	19.2	16.6	25.9
73	12.1	10.3	10.0	9.1	3.7	10.3	10.5	11.9	17.1	14.5	22.3
74	6.0	4.8	5.6	7.3	- 0.9	3.3	7.0	4.4	9.1	9.7	11.7
75	4.6	2.8	4.9	4.3	- 1.0	2.2	0.3	3.8	8.4	8.7	11.9
76	6.7	5.8	8.6	6.8	- 1.9	7.4	0.2	6.3	9.1	7.8	11.4
77	7.9	7.1	6.9	10.8	3.6	6.7	3.0	7.4	9.0	10.3	10.8

[a] See footnote [a] to Table E.[b] See footnote [a] to Table D.

Source of the data

The estimates of profitability in this article are based on the published accounts of more than 1,000 large listed companies, as presented in the Department of Industry's Business Monitor MA3: Company Finance. The present size criteria for inclusion in the sample are net assets of at least £5 million or gross income of at least £500,000 in 1973. An earlier article[1] indicated a number of reasons for interpreting profitability estimates derived from this source-on that occasion, at the aggregate level-with caution, and it may be useful to reiterate them. First, the financial behaviour and performance of the relatively large companies within the Business Monitor sample-although covering about 60% of gross fixed assets and investment in the case of manufacturing industry, but rather less in distribution and services-may not be wholly representative of the company sector as a whole. Secondly, the sample excludes companies operating 'mainly' overseas, but a significant element of overseas activity nevertheless remains in the sample from the overseas branches and subsidiaries of companies operating principally in the United Kingdom. In addition, the sample excludes the UK activities of companies operating 'mainly' overseas, which, in some cases, are very substantial. Thirdly, the profitability estimates presented in this article for a given calendar year relate to accounting years ending between 6th April of that year and 5th April of the following year. In practice, however, this qualification is not of great importance because about 70% of listed companies' accounting years end in the fourth and first calendar quarters.[2]

The interpretation of the disaggregated profitability estimates presented in this article requires rather more caution than is the case with aggregate profitability estimates. Companies within the *Business Monitor* sample have been allocated to industries according to their principal activity but, with many diversified companies included within the sample, any one industry as presented in the *Business Monitor* inevitably includes some activities which do not rightfully belong therein, and excludes some which do.[3] Further, there are sectoral differences in the extent to which the results are compromised by the presence of diversified companies within the sample, and by the dependence of the sample on companies operating 'mainly' in the United Kingdom and on large companies.

[1] December 1978 Bulletin, page 513.

The December 1978 braining page sted that these timing differences have been more important in recent years, when the rate of inflation has been high and changing rapidly, because stock appreciation was calculated by reference to the change in the price of stocks during a calendar year. This article uses stock price indices, specific to each sector, which reflect the average accounting years of companies within those sectors.

^[3] This difficulty is mitigated to some extent by the exclusion of the most highly diversified companies from the individual sectors considered in this article.