The Capital Stock of the United Kingdom - some new developments in coverage and methodology

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Background

Estimates of the Capital Stock of the United Kingdom are a measure of the cost of replacing the capital assets held at a particular point in time. These estimates can be calculated either to exclude depreciation (gross) or to include it (net). This depreciation, known as Consumption of Fixed Capital, is also deducted from Gross Fixed Capital Formation to arrive at an estimate of Net Fixed Capital Formation.

These series have been published annually by the Office for National Statistics (ONS). However, except for Gross Fixed Capital Formation, and sector totals for Consumption of Fixed Capital, we did not publish them in the 1998 edition of the United Kingdom National Accounts (BB98). This was because work was underway to improve the method of estimating Capital Stock, and to bring it into line with the expanded definitions of a capital asset in the new European System of Accounts (ESA95).

The purpose of this article is to bring readers up to date with the progress of this project so far, by publishing tables for Gross and Net Capital Stock and Consumption of Fixed Capital, compatible with the estimates of Gross Fixed Capital Formation in BB98. As work on the project is not yet complete, we will not be incorporating the figures as revisions to the National Accounts in BB99. For technical reasons it is not possible at present to publish tables of Net Fixed Capital Formation. We will publish another article in *Economic Trends* in the summer to keep users informed of progress. The article also explains the reasons for changes to previously published figures, and describes the work currently underway to further improve these series.

The tables

The tables that accompany this article are in a similar format to those published in the 1997 edition of the United Kingdom National Accounts (BB97), but are not compatible with them. A study by the National Institute for Economic and Social Research (NIESR) has re-examined the basis of the methodology for producing this data. They made a number of recommendations to ONS which we accepted. Many of these recommendations relate to the service lives of assets. As explained below, these service lives are of fundamental importance to the model that calculates Capital Stock, and the changes made to them are included here for the first time. In addition the tables in BB97 did not include the new classes of capital asset specified in ESA95 which are now incorporated in these tables. Constant price series have been rebased from 1990 to 1995 in line with BB98.

Changes to the Perpetual Inventory Method (PIM)

Capital stock estimates are not at present derived from directly collected data, but from a model-based approach, which is employed in many countries as well as by the UK. This is the Perpetual Inventory Method. In order to understand the changes made to methodology it is useful, briefly, to summarise the history of the PIM. Estimates of capital stock in the UK were first produced in 1955 using a simple form of the PIM, and a series going back to 1948 was constructed. The gross capital stock was calculated on the basis of accumulated capital expenditure less retirements. Asset types were assumed to have certain fixed life spans, and were "retired" from the accumulated capital expenditure when that life span was concluded.

By the mid 1970s it became clear that this model was too simple in its assumption of absolutely fixed life spans for assets. There had been an extraordinarily erratic pattern of expenditure by British industry - particularly the engineering industry - during and immediately following the Second World War. Under the simple model then in use, many of the assets acquired during these years were about to be retired over a short period of time. This cluster of retirements would necessarily have led to a distortion in the capital stock figures in the coming years. We therefore decided to modify the model to phase retirements so that they would be evenly

distributed over a period of years around the actual expected service life. The period chosen was from minus 20 per cent to plus 20 per cent of the expected life. Thus, where a group of assets of the same class is expected to have a service life of 25 years, retirements were spread evenly over a period from 20 to 30 years.

The principles that underlie this revised model are still in operation. A more detailed description of the methodology can be found in an earlier *Economic Trends* article (Revised Estimates of the Consumption and Stock of Fixed Capital - Tom Griffin - *Economic Trends* October 1975). Photocopies of this article can be made available on request.

In theory, PIM should provide accurate results, but in practice it is, as with any model-based approach, only as accurate as the assumptions that underpin it. It has always been possible to collect reasonably accurate figures of capital expenditure from industry. It is not so easy to obtain accurate and current information on the life span of different classes of asset. In an ideal situation of a totally stable economy, and limited technological change, provided the initial estimate of life spans was reasonably accurate, there would be no problem with PIM. But, that type of industrial environment does not exist, and never will. In practice actual asset lives change over time, and sometimes they change very rapidly. There can be many reasons for this, but two stand out at the moment.

a) Firstly a downturn in the economy leads to both voluntary and compulsory company liquidations. When a company is liquidated, it is likely that some, if not all, of its fixed assets will be prematurely scrapped. Obviously creditors try to obtain the best price for the assets of a company. In practice, however, this may often mean selling as scrap an asset that had many years of productive life left in it. In 1975, when the current PIM model was introduced, there were 1,275 voluntary and compulsory liquidations in manufacturing industry in the UK. In 1992 the figure was 5,449, and in that year the total number of liquidations for all industry was more than 24,000, compared with around 5400 in 1975. Although the majority of these liquidations were likely to involve smaller companies with limited fixed assets, some larger establishments were also affected. In addition to this many large companies, during periods of economic difficulty, close individual plants, and this too often leads to the wholesale premature scrapping of assets. The assumptions of asset lives which underlie PIM do not allow for such premature asset death.

b) The second phenomenon that undermines the reliability of PIM is rapid technological change. This is also unpredictable and leads to the scrapping of fixed assets earlier than would otherwise have been the case. It is much harder to quantify this, but there is no doubt that increasing and accelerating automation has occurred over recent years. This has led to the purchase of ever more sophisticated plant and equipment by industry, leading once again to unexpectedly early asset disposal.

The result of these changes has been for PIM to overestimate the level of capital stock in the UK, possibly by as much as 10 per cent for some industries. The scale of the error varies between asset types, but PIM appears to be most accurate in measuring capital stock in buildings. It seems most prone to inaccuracy in measuring capital stock in plant and equipment, with computers probably the greatest problem area.

How then to keep up with these changes? It is not possible to follow the original route of Inland Revenue depreciation allowances. Since PIM was first introduced, depreciation allowances have been used by successive governments as a tool to encourage capital investment. Assets are therefore written off for tax purposes by companies, often while still in use, and long before their useful lives are over. Nor is the use of a company's annual report and accounts likely to be of great assistance. Although many firms do include a breakdown of their assets in their annual report, the details given are seldom sufficient for the purpose. For instance, where a company holds overseas assets, it is rare for the annual report to distinguish them from assets held in the UK.

Because of these doubts about the reliability of the estimates, and the lack of obvious data sources to correct them, the ONS asked NIESR to investigate the problem, and to suggest solutions. A paper[1] in the National Institute Economic Review summarised their findings. In brief, they confirmed the likely inaccuracy of recent PIM estimates. Their principal recommendation was that a feasibility study should be conducted to determine whether it was possible to collect capital stock data direct from industry. Subject to the results of this there should be a full benchmark survey designed to establish both the value and the age of capital stock. They suggested that the benchmark should be supplemented annually by information on the capital stock that has been scrapped.

In their final report to ONS[2] NIESR did conclude however that, pending any action on direct collection, further study was necessary in order to improve the current PIM estimates. This research showed that, although there was not a general feeling among experts that the service lives of assets have been declining over time.

a) There may have been an increasing amount of investment in assets with shorter lives, in particular numerically controlled machinery and computers.

b) The effects of company deaths and closures had indeed led to the premature scrapping of assets in a way not allowed for in the PIM model.

The result of allowing for these factors would be a reduction of about 4 per cent in the level of gross capital stock in real terms for 1992, with an increase in the discrepancy in later years. This relatively modest figure would however be mainly the consequence of a significant reduction for plant and machinery. There would be little change in the estimates for buildings or vehicles.

NIESR have also recommended that the delayed linear retirement pattern in use since 1975 be changed to a normal distribution pattern. In other words, instead of all assets being retired in equal installments over ±20 per cent of their life, they are retired in a smooth bell shaped curve, with the summit of the curve at end of their average service life. The width of the bells is set on the basis of average service lives of the type of asset involved. For example, the service lives of vehicles are assumed to be less variable than those of most type of plant and machinery. Overall the retirement patterns assume a rather wider dispersion of asset lives than the old ones. NIESR made this recommendation because, with no clear evidence to the contrary it seemed to them reasonable to assume that a normal distribution would give a closer approximation to the pattern of retirements.

The tables accompanying this article now incorporate these changes.

Direct collection

As mentioned above the principal recommendation of the NIESR report was that ONS should examine the possibility of collecting capital stock data direct from industry. The ONS therefore undertook a feasibility study in 1995.

The purpose of the study was defined as follows.

a) To determine whether company asset registers contained the following information in readily accessible form:

- A description of each asset sufficiently detailed to place it into its broad asset category.
- The Historic cost (at acquisition) of each asset
- The date of capitalisation.

b) To establish whether industry would be prepared to supply this information on a voluntary basis.

c) To estimate the likely compliance cost for respondents.

d) To judge whether direct collection would be cost effective, and to estimate the resources which the ONS would need to employ.

e) To gain an insight into industry's policy on capitalisation - i.e. what was included and what excluded from its asset registers.

f) To see whether there was any information available to enable us to make new estimates of true asset lives.

The main findings of the study were as follows.

a) There is sufficient information available from enough businesses to make a full sample survey possible. This information is usually available in the form of a computerised asset register, which shows each current asset held, the date of acquisition, and the historic cost.

b) There is a direct relationship between the size of a business, measured by the number of employees, and the availability of information. As a result of this finding, businesses consisting of a single unit with fewer than 100 employees would need to be excluded from any full survey undertaken; businesses with between 101 and 300 employees would be sampled separately and less intensively.

c) Only very few companies retained information on disposed assets for any length of time. This means that it is not possible to obtain sufficient information directly from industry, other than anecdotal information, to judge the true service lives of assets. The period over which businesses depreciate assets fully is not a useful indicator because it is tax related rather than a true pointer to the expected life of an asset.

As a result of this study and a subsequent pilot ONS decided that, when resources became available, we would conduct a postal survey of businesses to establish a rolling benchmark of capital stock. It is probable that this will commence in the new financial year, and that the results will be used in parallel with the PIM to produce more robust estimates over a longer period of time.

The ESA 95

The European System of Accounts 1995 specifies new classes of fixed asset. From now on, ONS will include the value of these assets in its estimates of Capital Stock and Net Capital Formation. The new definitions of assets were described in detail in Chapter 6 of *The National Accounts Concepts, Sources and Methods* (The Stationery Office 1998) . Table 6.3 is particularly relevant. Assets are now divided into four broad categories:

- Produced Tangible
- Produced Intangible
- Non-produced Tangible
- Non-Produced Intangible.

Capital stock covers only the first two of these categories; that is, all produced assets. The new types of assets included in the tables in this article are as follows:

- Military buildings or equipment other than destructive weapons or vehicles whose only function is to deliver them. These items are classified as tangible produced assets, and are included in the estimates for vehicles, plant and machinery, and other buildings and works.

- Livestock cultivated for the products they produce rather than for their meat (e.g. dairy cattle, and breeding stock). These are classified as produced assets, and are now included under the agricultural assets heading. Poultry for egg production are excluded because of their short life span, and sheep are also excluded because, in the UK, they are reared mainly for meat. Their wool is only a by-product.

And the following, which are classified as produced intangible assets:

- Major items of computer software whether purchased, or developed in-house by the user.

- Mineral exploration costs

- Artistic and literary originals (e.g. films, books and broadcast media).

ESA95 also provides for consumption of fixed capital for roads, and this is now included. Previously, although the value of roads was included in estimates of gross capital stock, it was assumed that there was no depreciation.

There remains one class of assets that are not included in these tables, but which are classified as tangible assets by ESA 95. These are growing plants that produce a regular crop year after year. In the UK this means fruit trees and vines. Work is still in progress on obtaining an estimate of their value, and we will make this addition to agricultural assets when the tables appear in future publications.

In addition to the new classes of asset, the tables also take into account certain changes to the definition of the sectors of the economy, as set out in ESA95. The new sectors are listed in the Introduction (page 8) of BB98.

The extent of the changes

The table below indicates, for the latest three years the extent of the differences between the tables accompanying this article, and those published in BB97. In addition to the reasons for changes described above, there have also been some changes due to revisions in investment data between BB97 and BB98:

Changes between BB97 and present figures

Current Prices

	Capital Consumption £m	Net Capital Stock £b
1992	13472	28
1993	16668	22
1994	9541	21
1995	7238	18
1996	6067	-39

For the most part these changes are positive because of the addition of the new capital asset classes in ESA95. However, the effect of the changes to the capital stock model recommended by NIESR is to reduce capital stock, and this effect increases over time. In 1996, this negative effect was, for the first time, greater than the positive effect of the ESA95 changes.

References

1 David Mayes and Garry Young "Improving the Estimates of Capital Stock" *National Institute Economic Review*, London, February 1994

2 Lansbury, Soteri and Young "Retrospective Estimates of Capital Stock" 1995

1 Gross capital stock by industry at 1995 prices[1]

£ billion at 1995 prices

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture, hunting, forestry and fishing	CIXN	43.5	43.7	43.9	44.2	44.2	44.4	44.6	45.0	45.3	45.7	45.6
Mining and quarrying	CIXO	83.9	84.5	85.0	86.2	88.3	89.5	88.9	86.7	85.3	83.8	82.6
Manufacturing	CIXP	377.4	380.0	384.5	388.2	386.8	382.0	373.9	368.5	367.5	368.5	371.8
Electricity, gas and water supply	CIXQ	160.6	161.3	162.4	164.1	167.0	171.3	175.0	177.8	179.5	180.2	181.1
Construction	CIXR	22.5	23.3	24.0	24.5	24.3	23.8	23.3	23.1	23.1	23.1	24.0
Wholesale and retail trade; repairs; hotels and restaurants	CIXS	127.3	134.5	142.0	148.3	153.0	157.0	160.5	164.5	170.8	177.3	187.2
Transport and storage	CIXT	95.7	95.3	95.1	94.2	95.3	98.3	100.4	103.7	104.8	105.6	108.9
Post and telecommunications	CIXU	61.1	63.6	67.3	71.0	72.0	72.4	73.3	73.4	75.0	79.5	82.3
Financial intermediation, real estate, renting, and business activities	CIXV	138.2	153.0	175.1	194.5	207.3	215.4	221.6	229.7	238.8	251.9	261.4
Other services[2]	CIXW	336.6	346.8	359.2	373.0	385.9	399.6	413.7	427.8	441.2	454.0	466.6
Dwellings	EXEO	855.5	880.1	903.9	923.9	940.4	957.2	975.2	994.0	1 012.1	1 030.6	1 050.0
Total	CIXX	2 302.6	2 366.6	2 442.5	2 512.2	2 564.7	2 611.4	2 650.5	2 694.4	2 743.7	2 800.8	2 862.1

2 Gross capital stock by type of asset at 1995 prices[1]

£ billion at 1995 prices

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Road vehicles	CIXY	105.6	107.5	109.7	112.4	113.1	112.8	113.1	113.3	113.6	113.7	112.6
Railway rolling stock, ships and aircraft	EXER	20.1	18.9	17.6	16.4	15.6	16.1	16.7	17.6	16.7	16.7	18.4
Plant and machinery	CIXZ	593.0	608.6	629.6	648.5	656.3	657.8	651.7	650.4	658.6	673.8	691.5
Dwellings	EXEO	855.5	880.1	903.9	923.9	940.4	957.2	975.2	994.0	1 012.1	1 030.6	1 050.0
Other buildings and works	CIYA	699.6	721.2	750.0	777.5	803.9	831.2	857.2	882.6	905.9	928.7	951.6
Intangible assets	BGUR	28.8	30.3	31.7	33.5	35.4	36.3	36.6	36.5	36.8	37.3	38.0
Total	CIXX	2 302.6	2 366.6	2 442.5	2 512.2	2 564.7	2 611.4	2 650.5	2 694.4	2 743.7	2 800.8	2 862.1

1 Differences between totals and sums of components are due to rounding.
2 Comprising sections L,M,N,O,P & Q of the SIC(92).

3 Net capital stock by sector and type of asset at current prices[1]

£ billion

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Vehicles, ships and aircraft:												
Households & NPISHs[2]	BGUU	6.6	7.4	7.3	7.8	7.6	8.0	7.9	7.1	7.1	7.6	7.5
Financial corporations	CIWL	2.3	2.9	3.6	4.1	4.1	3.7	3.5	3.3	3.4	3.8	3.5
Private non-financial corporations[3]	CIWK	26.9	29.7	35.0	38.8	39.5	37.3	37.8	41.2	42.6	45.6	50.6
Public non-financial corporations	CIWM	4.8	4.7	4.3	4.4	4.4	4.9	5.2	5.7	5.9	2.7	2.7
Central government	CIWN	6.5	7.4	8.3	8.5	8.0	7.6	7.6	8.1	8.6	8.8	8.8
Local government	EXGM	1.3	1.3	1.5	1.6	1.5	1.4	1.3	1.3	1.3	1.2	1.1
Total	BGUV	48.4	53.4	60.0	65.2	65.1	62.9	63.3	66.7	68.9	69.7	74.2
Plant and machinery:												
Households & NPISHs[2]	CIWO	11.5	12.4	13.7	14.9	15.8	16.8	17.8	18.6	19.9	21.2	23.0
Financial corporations	CIWQ	8.0	8.3	9.9	11.0	10.9	10.8	10.6	10.2	9.8	9.7	9.6
Private non-financial corporations[3]	CIWP	173.7	185.6	204.8	246.9	265.8	277.7	287.6	293.8	303.3	315.7	325.9
Public non-financial corporations	CIWR	51.0	51.3	51.2	27.6	18.7	17.9	17.3	16.5	15.7	9.4	8.8
Central government	CIWS	7.2	7.9	8.8	9.9	10.7	11.4	12.3	12.6	12.8	12.7	12.4
Local government	CIWT	5.3	5.6	6.0	6.4	6.3	6.3	6.3	6.2	5.9	5.5	5.2
Total	CIWU	256.7	271.1	294.4	316.7	328.2	340.9	351.9	357.9	367.4	374.2	384.9
Dwellings:												
Households & NPISHs[2]	CIWV	316.0	368.0	421.0	471.8	478.3	477.0	485.9	510.5	537.2	561.3	616.7
Financial corporations	CIWX	–	–	–	–	–	–	–	–	–	–	–
Private non-financial corporations[3]	CIWW	7.4	8.3	9.2	9.6	9.6	9.4	9.4	9.6	9.9	10.1	10.9
Public non-financial corporations	CIWY	12.7	14.1	15.4	15.6	15.1	14.4	14.3	15.1	15.8	16.0	17.1
Central government	EXGZ	3.1	3.5	3.8	4.1	4.1	4.1	4.4	4.9	5.3	5.6	6.3
Local government	EXHA	94.0	104.2	113.8	96.4	92.9	88.3	88.2	93.4	97.5	98.6	104.9
Total	CIWZ	433.2	498.1	563.2	597.5	600.0	593.2	602.2	633.5	665.7	691.6	755.9
Other buildings and works:												
Households & NPISHs[2]	CIXA	25.8	26.5	29.7	33.0	31.7	29.3	29.3	32.5	35.7	38.2	43.0
Financial corporations	CIXC	25.6	26.5	31.5	37.8	36.2	33.7	33.1	35.8	39.7	42.2	46.0
Private non-financial corporations[3]	CIXB	151.5	166.3	223.8	244.6	236.6	226.8	230.1	251.2	280.8	323.9	352.1
Public non-financial corporations	CIXD	65.8	73.0	48.3	47.9	42.1	40.6	41.9	47.2	54.0	37.7	41.9
Central government	CIXE	77.5	88.7	100.0	104.1	99.6	93.9	94.5	103.9	117.0	127.4	137.9
Local government	EXHH	88.5	101.2	114.3	117.9	110.5	102.6	102.5	112.3	126.9	138.4	151.8
Total	CIXF	434.7	482.2	547.6	585.3	556.7	526.9	531.4	582.9	654.1	707.8	772.7
Intangible assets:												
Households & NPISHs[2]	BGUK	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Financial corporations	BGUM	0.5	0.6	0.7	0.8	1.0	1.1	1.1	1.1	1.0	1.1	1.2
Private non-financial corporations[3]	BGUL	9.9	10.8	11.9	13.3	14.7	15.2	15.3	15.1	15.2	15.4	15.7
Public non-financial corporations	BGUN	0.5	0.5	0.5	0.6	0.8	1.0	1.2	1.5	1.8	2.3	2.7
Central government	BGUO	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Local government	BGUP	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total	BGUQ	11.2	12.5	13.7	15.3	17.4	18.2	18.5	18.6	18.9	19.7	20.5
All assets:												
Households & NPISHs[2]	CIXG	360.0	414.5	471.9	527.7	533.7	531.4	541.2	569.0	600.2	628.6	690.5
Financial corporations	CIXI	36.4	38.3	45.7	53.7	52.2	49.3	48.3	50.4	53.9	56.8	60.3
Private non-financial corporations[3]	CIXH	369.4	400.7	484.7	553.2	566.2	566.4	580.2	610.9	651.8	710.7	755.2
Public non-financial corporations	CIXJ	134.8	143.6	119.7	96.1	81.1	78.8	79.9	86.0	93.2	68.1	73.2
Central government	CIXK	94.4	107.7	121.1	126.8	122.7	117.3	119.1	129.8	144.0	154.8	165.7
Local government	CIXL	189.2	212.5	235.8	222.5	211.5	198.9	198.6	213.5	231.9	244.0	263.3
Total	CIXM	1 184.2	1 317.3	1 478.9	1 580.0	1 567.4	1 542.1	1 567.3	1 659.6	1 775.0	1 863.0	2 008.2

1 Differences between totals and sums of the components are due to rounding.
2 Non-profit institutions serving households.
3 Including quasi-corporations.

4 Consumption of fixed capital by industry group at current prices[1]

£ million

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture, hunting, forestry and fishing	CIGG	1 886	1 910	2 080	2 136	2 136	2 304	2 427	2 358	2 478	2 662	2 712
Mining and quarrying	CIGH	4 527	4 830	5 325	5 631	6 034	5 995	6 139	6 033	6 176	6 214	5 989
Manufacturing	CIGI	11 656	11 767	12 530	13 020	14 710	15 951	18 052	17 559	17 216	16 661	16 672
Electricity, gas and water supply	CIGJ	3 264	3 399	3 697	3 815	3 965	3 991	4 180	4 453	4 844	5 107	5 299
Construction	CIGK	807	835	891	956	1 111	1 243	1 370	1 321	1 276	1 230	1 258
Wholesale and retail trade; repairs; hotels and restaurants	CIGL	3 821	4 031	4 154	4 672	5 349	5 959	6 654	6 518	6 682	6 733	6 802
Transport and storage	CIGM	3 035	3 066	3 351	3 433	3 492	3 533	3 629	3 885	3 979	4 362	4 562
Post and telecommunications	CIGN	2 409	2 541	2 815	3 043	3 284	3 532	3 872	4 142	4 361	4 572	4 489
Financial intermediation, real estate, renting and business activities	CIGO	4 994	5 545	5 860	6 912	8 427	9 713	11 171	11 254	10 865	11 034	11 085
Other services[2]	CIGP	5 831	6 386	7 445	8 314	8 845	8 985	9 468	9 760	10 425	11 078	11 446
Dwellings	EXCT	7 734	8 829	10 244	11 380	11 954	12 151	12 331	12 992	13 968	14 751	15 550
Transfer costs of land and buildings	EXCU	4 051	5 457	4 391	4 255	4 163	2 946	3 431	3 807	3 695	4 396	5 344
Total	NQAE	54 015	58 596	62 783	67 567	73 470	76 303	82 724	84 082	85 965	88 800	91 208

5 Consumption of fixed capital by industry group at 1995 prices[1]

£ million at 1995 prices

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture, hunting, forestry and fishing	CIGQ	2 411	2 368	2 383	2 401	2 424	2 488	2 479	2 481	2 478	2 505	2 511
Mining and quarrying	CIGR	5 970	6 047	6 106	6 159	6 484	6 686	6 710	6 419	6 176	5 927	5 732
Manufacturing	CIGS	15 893	15 711	15 709	15 559	16 990	18 331	19 450	18 235	17 216	16 186	16 420
Electricity, gas and water supply	CIGT	4 014	4 036	4 105	4 129	4 280	4 408	4 540	4 705	4 844	4 951	5 070
Construction	CIGU	1 155	1 156	1 154	1 162	1 297	1 429	1 524	1 409	1 276	1 199	1 222
Wholesale and retail trade; repairs; hotels and restaurants	CIGV	5 097	5 175	5 214	5 299	5 917	6 604	7 150	6 775	6 682	6 588	6 710
Transport and storage	CIGW	4 160	3 977	4 050	3 880	3 819	3 870	3 969	4 091	3 979	4 227	4 435
Post and telecommunications	CIGX	3 024	3 189	3 439	3 577	3 741	3 956	4 073	4 205	4 361	4 558	4 686
Financial intermediation, real estate, renting and business activities	CIGY	5 465	6 072	6 500	7 037	8 568	10 164	11 557	11 408	10 865	11 049	11 442
Other services[2]	CIGZ	7 054	7 300	7 809	8 192	8 875	9 518	10 182	10 294	10 425	10 683	10 928
Dwellings	EXDG	10 858	11 299	11 689	12 086	12 491	12 902	13 260	13 628	13 968	14 351	14 737
Transfer costs of land and buildings	EXDH	6 113	6 679	4 810	4 337	4 176	3 640	3 857	4 123	3 695	4 061	4 455
Total	CIHA	71 214	73 009	72 968	73 818	79 062	83 996	88 751	87 773	85 965	86 285	88 348

1 Differences between totals and sums of components are due to rounding.
2 Comprising sections L, M, N, O, P and Q of the SIC(92).

6 Consumption of fixed capital by sector at current prices[1]

£ million

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Dwellings:												
Households & NPISHs[2]	CIHB	5 857	6 741	7 846	9 151	9 721	9 970	10 193	10 732	11 515	12 215	12 934
Financial corporations	BGUS	–	–	–	–	–	–	–	–	–	–	–
Private non-financial corporations[3]	CIHC	194	213	237	257	267	267	268	272	282	289	296
Public non-financial corporations	CIHD	149	164	187	199	197	189	183	193	209	214	220
Central government	EXFB	38	42	49	54	54	53	55	59	66	72	75
Local government	EXFC	1 496	1 669	1 925	1 719	1 715	1 672	1 632	1 736	1 896	1 961	2 025
Total	EXCT	7 734	8 829	10 244	11 380	11 954	12 151	12 331	12 992	13 968	14 751	15 550
Other tangible assets[4]:												
Households & NPISHs[2]	CIHE	5 820	6 869	6 373	6 592	6 879	6 332	7 031	7 299	7 330	7 966	8 642
Financial corporations	CIHG	2 005	2 229	2 015	2 292	2 660	2 948	3 304	3 164	2 804	2 667	2 451
Private non-financial corporations[3]	CIHF	26 231	27 697	29 804	32 749	38 324	41 529	46 492	46 799	47 351	49 039	50 330
Public non-financial corporations	CIHH	5 685	5 726	6 034	5 340	3 948	3 522	3 527	3 518	3 585	2 930	2 354
Central government	CIHI	2 234	2 488	2 938	3 238	3 327	3 282	3 354	3 526	3 897	4 159	4 237
Local government	CIHJ	2 323	2 590	2 918	3 139	3 132	2 951	2 951	3 046	3 271	3 505	3 666
Total	CIHK	44 298	47 599	50 082	53 350	58 270	60 564	66 658	67 352	68 238	70 266	71 680
Intangible assets:												
Households & NPISHs[2]	BGTW	52	57	66	79	99	114	121	121	119	116	128
Financial corporations	BGTY	182	196	230	281	343	400	426	423	416	403	449
Private non-financial corporations[3]	BGTX	1 576	1 729	1 955	2 236	2 516	2 744	2 830	2 819	2 818	2 833	2 887
Public non-financial corporations	BGTZ	69	73	75	82	94	99	117	135	166	201	254
Central government	BGUA	52	56	66	80	98	114	122	121	119	116	128
Local government	BGUB	52	57	66	80	98	114	120	121	119	114	129
Total	BGUC	1 983	2 168	2 458	2 838	3 248	3 585	3 736	3 740	3 757	3 783	3 975
All assets:												
Households & NPISHs[2]	QWLL	11 729	13 667	14 285	15 822	16 699	16 416	17 345	18 152	18 964	20 297	21 704
Financial corporations	NHCE	2 187	2 425	2 245	2 573	3 003	3 348	3 730	3 587	3 220	3 070	2 900
Private non-financial corporations[3]	NSRK	28 001	29 639	31 996	35 242	41 107	44 540	49 590	49 890	50 451	52 161	53 513
Public non-financial corporations	NSRM	5 903	5 963	6 296	5 621	4 239	3 810	3 827	3 846	3 960	3 345	2 828
Central government	NSRN	2 324	2 586	3 053	3 372	3 479	3 449	3 531	3 706	4 082	4 347	4 440
Local government	NSRO	3 871	4 316	4 909	4 938	4 945	4 737	4 703	4 903	5 286	5 580	5 820
Total	NQAE	54 015	58 596	62 783	67 567	73 470	76 303	82 724	84 082	85 965	88 800	91 208

1 Differences between totals and sums of components are due to rounding.
2 Non-profit institutions serving households.
3 Including quasi-corporations.
4 Including transfer costs of land and buildings. They are wholly written off in the year incurred.

7 Net fixed capital formation[1] by industry group[2] at current prices

£ million

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture, hunting, forestry and fishing	CIIF	–197	–39	–43	–37	–305	–201	–66	116	–57	–16	–360
Mining and quarrying	CIIU	–841	–655	–658	240	1 522	1 231	–41	–1 021	–360	–226	–104
Manufacturing	CIKF	–497	956	2 131	1 625	–908	–3 097	–5 212	–3 508	332	1 597	3 898
Electricity, gas and water supply	CIVD	–497	–401	–47	447	1 798	2 758	2 195	1 309	379	–615	–463
Construction	CIVE	36	497	497	327	–271	–388	–340	–118	–7	–65	675
Wholesale and retail trade; repairs; hotels and restaurants	CIVF	3 906	5 491	5 404	4 583	3 049	2 399	1 975	2 398	4 862	5 035	8 355
Transport, storage and communication	CIVG	1 580	2 517	4 032	3 417	2 029	1 964	2 086	3 500	3 410	5 153	5 853
Financial intermediation, real estate, renting and business activities	CIVH	6 955	11 036	16 062	16 169	8 830	3 749	1 809	3 746	5 235	8 973	6 211
Other services[3]	CIVI	6 047	6 474	9 064	10 943	9 775	9 642	9 250	9 555	9 824	9 907	10 322
Dwellings	EXDP	8 813	12 268	12 526	9 667	6 384	6 675	7 560	8 240	7 621	8 016	9 092
Total	CIVJ	25 305	38 144	48 967	47 380	31 901	24 735	19 215	24 215	31 241	37 759	43 482

8 Net fixed capital formation[1] by industry group at 1995 prices[2]

£ million at 1995 prices

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture, hunting, forestry and fishing	CIVK	–249	–38	–35	–23	–343	–260	–96	113	–57	–11	–353
Mining and quarrying	CIVL	–1 386	–1 064	–1 023	–58	1 526	1 320	–19	–1 033	–360	–226	–92
Manufacturing	CIVM	–1 519	246	1 522	933	–1 801	–4 183	–5 746	–3 654	332	1 558	3 881
Electricity, gas and water supply	CIVN	–623	–525	–140	357	1 819	2 955	2 341	1 393	379	–589	–311
Construction	CIVO	51	665	616	382	–326	–435	–390	–133	–7	–55	707
Wholesale and retail trade; repairs; hotels and restaurants	CIVP	4 515	6 115	5 341	4 476	2 958	2 529	2 201	2 604	4 862	4 820	8 045
Transport, storage and communication	CIVQ	1 576	2 745	4 325	3 519	2 063	2 222	2 410	3 679	3 410	5 087	5 902
Financial intermediation, real estate, renting and business activities	CIVR	8 184	12 546	16 371	16 029	8 865	3 864	1 974	4 110	5 235	8 877	6 289
Other services[3]	CIVS	6 684	6 751	8 316	9 703	8 904	9 806	10 284	10 619	9 824	9 275	9 357
Dwellings	EXEB	12 978	16 297	15 407	11 348	7 096	7 139	8 231	8 639	7 621	7 803	8 517
Total	CIVT	30 211	43 738	50 700	46 666	30 761	24 957	21 190	26 337	31 241	36 539	41 942

1 Gross fixed capital formation *less* capital consumption.
2 Differences between totals and sums of components are due to rounding.
3 Comprising sections L, M, N, O, P and Q of the SIC(92).

9 Net fixed capital formation[1] by sector at current prices[2]

£ million

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Dwellings:[3]												
Households & NPISHs	CIVU	7 604	11 253	10 908	7 526	5 674	6 085	6 724	7 341	7 053	8 017	9 426
Financial corporations	BGUT	–	–	–	–	–	–	–	–	–	–	–
Private non-financial corporations	CIVV	–16	–4	–34	–68	–86	–75	–62	–61	–65	–53	–38
Public non-financial corporations	CIVW	96	62	36	2	–44	–17	–33	–54	–47	–63	–85
Central government	EXFR	41	43	76	198	156	165	313	261	155	242	203
Local government	EXFS	1 088	914	1 540	2 009	684	517	618	753	525	–127	–414
Total	EXDP	8 813	12 268	12 526	9 667	6 384	6 675	7 560	8 240	7 621	8 016	9 092
Other tangible assets:												
Households & NPISHs	CIVX	3 035	3 624	2 946	2 936	1 608	805	1 471	3 466	4 202	6 349	4 932
Financial corporations	CIVZ	1 373	4 439	6 115	4 196	3 196	1 559	–191	2 038	1 621	2 047	3 109
Private non-financial corporations	CIVY	11 416	18 265	25 758	26 094	14 890	8 109	4 355	4 471	11 338	17 610	23 120
Public non-financial corporations	CIWA	–1 370	–1 373	–797	–591	–320	1 455	1 204	1 277	1 394	1 375	1 417
Central government	CIWB	2 286	2 475	3 326	4 475	5 035	4 893	4 207	3 756	3 233	1 463	674
Local government	CIWC	–347	–1 978	–1 272	–130	294	1 043	697	1 094	1 650	546	735
Total	CIWD	16 393	25 452	36 076	36 980	24 702	17 864	11 743	16 102	23 438	29 390	33 987
Intangible assets:												
Households & NPISHs	BGUD	7	14	20	23	12	4	3	8	13	21	13
Financial corporations	BGUF	25	52	72	80	42	13	6	27	46	74	44
Private non-financial corporations	BGUE	56	339	240	507	579	15	–264	–416	–233	–169	–37
Public non-financial corporations	BGUG	–3	–10	–9	77	158	156	162	239	330	384	358
Central government	BGUH	7	15	21	23	12	4	2	8	13	21	13
Local government	BGUI	7	14	21	23	12	4	3	7	13	22	12
Total	BGUJ	99	424	365	733	815	196	–88	–127	182	353	403
All assets:												
Households & NPISHs	CIWE	10 646	14 891	13 874	10 485	7 294	6 894	8 198	10 815	11 268	14 387	14 371
Financial corporations	CIWG	1 398	4 491	6 187	4 276	3 238	1 572	–185	2 065	1 667	2 121	3 153
Private non-financial corporations	CIWF	11 456	18 600	25 964	26 533	15 383	8 049	4 029	3 994	11 040	17 388	23 045
Public non-financial corporations	CIWH	–1 277	–1 321	–770	–512	–206	1 594	1 333	1 462	1 677	1 696	1 690
Central government	CIWI	2 334	2 533	3 423	4 696	5 203	5 062	4 522	4 025	3 401	1 726	890
Local government	CIWJ	748	–1 050	289	1 902	990	1 564	1 318	1 854	2 188	441	333
Total	CIVJ	25 305	38 144	48 967	47 380	31 901	24 735	19 215	24 215	31 241	37 759	43 482

1 Gross fixed capital formation *less* capital consumption.
2 Differences between totals and sums of components are due to rounding.
3 Excluding existing land and buildings.
4 Non-profit institutions serving households.
5 Including quasi-corporations.