

The external balance sheet of the United Kingdom: recent developments and measurement problems

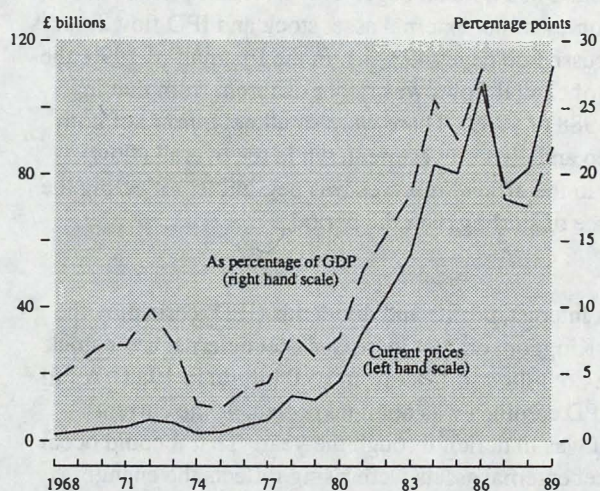
This article analyses the net external asset position of the United Kingdom. It considers the identified investment flows into and out of the country, the valuation changes to existing assets and the accrued flows of interest, profits and dividends—and also offers some international comparisons. A supplementary section features problems associated with balance of payments statistics, as reflected in the UK balancing item.

Continuing an annual series, the article covers developments during 1989 (using figures published in the 1990 CSO Pink Book) and gives indications for the first half of 1990.

Overview

The United Kingdom's net stock of identified external assets increased by £31 billion from its (revised) end-1988 level, to stand at £112 billion at end-1989. The rate of increase varied throughout the year, principally mirroring revaluations due to the fluctuations in sterling. Sterling's recovery in the first half of 1990 will have reduced the sterling value of the net stock of external assets, perhaps to below £80 billion by mid-year.

Chart 1
Level of net external assets, in current prices and as a percentage of nominal GDP



Of the £31 billion increase in the United Kingdom's identified net external asset stock between end-1988 and end-1989, net identified capital inflows of £4 billion were overwhelmed by a positive stock revaluation of £35 billion (Tables A and B; Charts 1 and 2). Such revaluations of the external asset stock can have their source, broadly, either in movements of the exchange rate (which alter the sterling value of foreign currency denominated assets), or in movements of security prices (in the case of portfolio investment assets)—Table A suggests the scale of these components. These estimates are necessarily approximate,

Table A
Change in identified net external assets^(a)

£ billions	Average ^(b)	1987	1988	1989	1990H1
	1980-1986				
A Net asset level (end-year)	106.5	76.0	81.8	112.5	78.7 ^(c)
B Change in identified net assets (increase +)	13.4	-30.5	5.9	30.7	-33.8
Due to:					
(i) identified capital flows (inflows -)(d)	6.0	-0.5	-7.0	-4.0	-4.3
(ii) revaluations of which:	7.4	-30.1	12.9	34.7	-29.5
Share prices		1	16	10	-11
Bond prices		-5	—	3	—
Exchange rates		-25	-4	26	-24
Other ^(e)		—	1	-4	6
C Current balance (deficit-)	3.2	-4.2	-15.2	-19.1	-10.1 ^(f)
D Balancing item (inflows/credits +)	2.8	3.7	8.1	15.1	5.8

(a) $D = B(i) - C$.

(b) End-year net asset level refers to end-1986.

(c) This is a preliminary estimate of the net stock position at the end of the second quarter of the present year.

(d) Note the difference between this sign convention and that of the balance of payments.

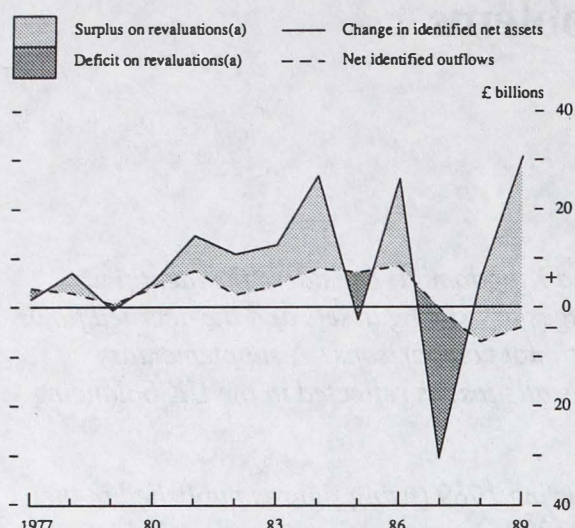
(e) Includes revaluations to direct investment stocks relating to write-offs, profitable disposals of assets, etc.

(f) Seasonally unadjusted.

given the relative dearth of up-to-date and accurate information on the location of assets, the currency of denomination, and the precise category of investment instrument involved.

The sterling effective exchange rate index weakened by 12% between end-1988 and end-1989, with broadly similar movements against both the dollar and non-dollar currencies. This depreciation helped to boost the sterling value of the United Kingdom's net external assets by around £26 billion during 1989, providing the principal contribution to the revaluation of the external asset stock. During the first half of 1990, however, the marked strengthening of sterling (6% in effective terms and 8% against the dollar) in large part offset the valuation gains of 1989 (since it was acting on a larger stock), depressing net external assets by around £24 billion.

Chart 2
Contributions to the change in UK net external assets



(a) Residual component - difference between change in recorded net stock and net identified outflows.

Table B
UK external assets and liabilities^(a)

£ billions	Stock end-1988	Identified capital flows	Net valuation effect ^(b)	Total change in stock	Stock end-1989
Direct investment:					
Assets ^(c)	111.1	19.5	14.6	34.1	145.1
Liabilities	66.9	18.3	1.2	19.6	86.5
Non-bank portfolio investment:					
Assets	117.8	30.3	31.2	61.5	179.4
Liabilities ^(d)	53.6	11.4	12.7	24.1	77.7
UK banks' ^(e) net liabilities in:					
Foreign currency ^{(c)(d)}	13.3	4.8	0.3	5.0	18.3
Sterling	23.0	7.2	-0.2	7.1	30.0
Public sector:					
Reserves (assets) less official foreign currency borrowing	22.5	-4.6	3.1	-1.4	21.0
British government stocks (liabilities)	18.8	-1.9	-0.4	-2.3	16.5
Other net public sector assets	5.3	-0.2	-0.8	-1.1	4.3
Other net assets	0.7	-9.2	0.2	-8.9	-8.2
Total net assets	81.8	-4.0	34.7	30.7	112.5

(a) The sign convention is not the same as in the balance of payments: a transaction that increases an itemised stock is + and one that decreases it is-.

(b) Residual component.

(c) UK banks' external borrowing from overseas affiliates is treated in the published data as an offset to outward direct investment, but is treated here as part of banks' net foreign currency liabilities.

(d) Estimated take-up of UK banks' bonds appears indistinguishably from foreign investment in other UK company securities in the published data, but is treated here as part of banks' net foreign currency liabilities. Banks' holdings of foreign currency bonds are treated as foreign currency lending.

(e) UK monetary sector plus certain other UK financial institutions.

The capital flows are shown in detail in Table C. The major shifts between 1988 and 1989 were a near twofold increase in gross inflows of direct investment, leading to a marked narrowing in the net outward flow; and a greater than threefold increase in gross outward portfolio flows, with other UK financial institutions⁽¹⁾ purchases of overseas equity providing the largest contribution to the increase. The weakness of sterling through 1989 was reflected in the shift from a net addition to official reserves (*less* official foreign

Table C
UK capital flows, 1976-89^(a)

£ billions	Annual averages		1988	1989	1990 H1
	1976-81	1982-87			
Direct investment:					
Net transactions in assets ^(b)	-4.0	-8.7	-20.0	-19.5	-8.6
Net transactions in liabilities	2.7	4.0	9.2	18.3	10.8
Non-bank portfolio investment:					
Net transactions in assets	-1.4	-5.6	-8.7	-30.3	-0.9
Net transactions in liabilities ^(c)	0.2	4.6	11.3	11.4	4.1
UK banks' ^(d) net liabilities in:					
Foreign currency ^{(b)(c)}	—	-0.2	3.8	4.8	-3.1
Sterling	0.3	1.6	9.3	7.2	3.2
Public sector:					
Reserves less official foreign currency borrowing	-0.6	-2.3	-2.0	4.6	—
British government stocks	0.7	2.0	0.9	-1.9	-2.0
Other public sector flows (net)	-0.2	-0.3	-0.6	0.2	-0.1
Other net flows	-0.8	-0.1	3.9	9.2	1.0
Total net identified capital flows	-3.1	-5.1	7.0	4.0	4.3

(a) Using balance of payments sign convention: increase in assets /liabilities +.

(b) See footnote (c) to Table B.

(c) See footnote (d) to Table B.

currency borrowing) of £2 billion in 1988 to a net withdrawal (in flow terms) of almost £5 billion in 1989 (although the sterling value of net reserves was little changed, because of the revaluation of existing stocks). Other important financing developments included overseas residents' £2 billion net sales of gilts (after net purchases in 1988), and a sharp rise in net borrowing by UK non-bank residents from overseas. With net banking inflows on a par with the previous year, this leaves the remaining finance of the recorded current account as yet unidentified—the balancing item expanding sharply to £15 billion. (An overview of the balancing item and measurement problems is presented in a note on pages 497-9; its implications for the accuracy of net external asset stock and IPD flow figures are discussed on pages 493-4.) In the first half of 1990, the pattern of capital flows was rather different from that in either 1988 or 1989. There were small net *inflows* of both portfolio and direct investment, while the overall (flow) change in the official reserves was negligible, reflecting the resilience of sterling over the period.

The net interest, profits and dividends (IPD) earned by the United Kingdom on the (increased) net external asset stock fell to £4.6 billion in 1989 from £5.0 billion in 1988. A fall in net IPD earnings was not unexpected, as the current account was in deficit through the year. That it could occur while net external assets were rising reflects the changing composition of the external balance sheet: net earnings on direct investment rose, but by less than the cost of banks' net liabilities and of net borrowing by UK non-bank residents from banks and non-banks overseas, with these higher costs reflecting both an increase in outstanding borrowing and higher interest rates. The decline in net IPD earnings on portfolio investment taken together with the sharp rise in the net stock of portfolio assets suggests that the returns on the United Kingdom's net outward investment in portfolio assets

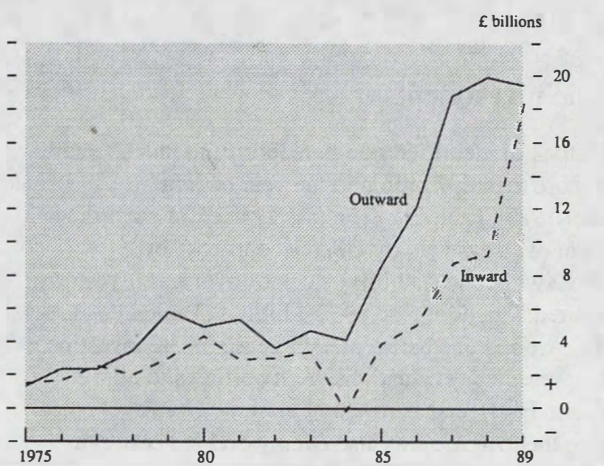
(1) These 'other financial institutions' (OFIs) comprise non-bank, non-building-society financial institutions, including insurance companies, pension funds, unit trust companies and securities dealers.

accrued mainly as (implicit) capital gains rather than in the form of IPD earnings.

Direct investment

The net stock of direct investment assets increased by £14 billion in 1989. This rise comprised a substantial upward revaluation to overseas assets reflecting the weakness of sterling over the year, together with a modest net outflow of new direct investment of £1 billion. The net outflow of direct investment recorded for 1989 was markedly lower than the net outflows recorded each year

Chart 3
Outward and inward non-bank direct investment



since 1983. Gross inflows virtually doubled to £18 billion, while gross outflows of £20 billion were on a par with 1988 (Chart 3). Having started the decade at a level equivalent to below 5% of GDP, the recorded stock of net direct investment assets rose to 11.5% of GDP at the close of 1989, from 9.5% at the end of the the previous year.

Recorded acquisitions of overseas companies by UK companies were at a record level in the third quarter of last year, at £8.6 billion. For the year as a whole, UK companies' acquisitions of overseas concerns totalled £23 billion, compared with overseas acquisitions of UK companies of only £11 billion. The United States continued to be the major counterparty in terms of both inward and outward acquisitions. These figures are not directly comparable with the balance of payments statistics because some takeovers are funded locally. Nevertheless, they suggest, in conjunction with the above gross direct investment figures, that non-takeover investment was more prevalent in the inward than the outward direction.

Foreign direct investment (FDI) and the current account

The *cumulative gross inflow* of FDI over the past three years has been very large at £36 billion, and is likely to have an impact on the United Kingdom's trade position, and indeed on the United Kingdom more widely. The trade balance may benefit from FDI both directly, as imports are replaced

by UK-supplied goods, and indirectly, if inward investment results in more efficient production and greater export potential. The size of the *direct* benefits will clearly depend on the import content of these goods—although if further investment is generated to develop the supply of intermediate goods to the original business, then the overall benefits may be enhanced. *Indirect* benefits are often claimed, for example, for Japanese investment in the United Kingdom, which tends to be in so-called greenfield projects rather than by acquisition; and, furthermore, tends to be concentrated in high value-added activities. Such investment is perhaps more readily seen to confer net gains on the United Kingdom than acquisition and merger investment, although both in theory should result in a more efficient use of resources. The scale of such investment cannot be gauged from the balance of payments statistics since many projects are financed locally in part.

1992 and the single market

An important issue regarding inward FDI (in particular, by acquisition of existing UK companies) is whether the United Kingdom will continue to attract a relatively high share of such investment once changes in EC legislation take effect and convergence, at least in a legal sense, occurs. This is likely to be true if—as appears to be the case—there exist important *non-legal* impediments to investment in some other EC countries.⁽¹⁾ The attractions offered by the United Kingdom probably include the existence of mature equity markets; widely dispersed share ownership (in the sense that share holdings tend not to be concentrated within individual families); absence of dominant inter-company and bank shareholdings; and relatively comprehensive shareholder registers. In those countries other than the United Kingdom which have wide share ownership (Germany, France and the Netherlands), takeovers are hindered *inter alia* by a predominance of bearer shares (Germany, Netherlands) and unrestricted issuance of non-voting shares (France).

Regarding the outlook for direct investment flows in the EC as a whole, there is a widespread expectation of extensive intra-EC acquisitions and joint ventures, as companies attempt to develop networks throughout the Community—distribution and service industries being among the most probable areas for expansion. Countries with already well-established links with the EC (for example, the United States) will experience greater benefits from the creation of the single market the greater their involvement in those sectors most able to reap gains from economies of scale.

International comparisons

International comparisons of direct investment are hampered by differences in methodology used in data measurement across countries. Not all countries adhere to the IMF/OECD recommendations for measuring direct investment. In the Japanese figures, for example, unremitted profits are excluded and no account is taken of disinvestment flows or of loans from affiliates to parents. Further discrepancies

(1) Support for this emerged in a report prepared for the UK Government by Coopers and Lybrand entitled 'Barriers to takeover in the European Community'.

arise in identifying the *destination* of any investment, a problem often connected with funds channelled through holding companies (mainly resident in the Netherlands and Switzerland), thus making it difficult to distinguish between the immediate source and the ultimate owner of the investment.⁽¹⁾ These disparities, along with the underlying problem of under-reporting and inaccurate reporting and the basic problem of securing timely and sufficiently disaggregated data, render the reconciliation of global direct investment figures difficult and suggest this area may be an important contributor to the 'black hole' in world balance of payments statistics.⁽²⁾

Historic cost measurement of direct investment stocks

A further measurement problem arises from the valuation of direct investment stocks at historic cost (or book value) rather than at current market value.⁽³⁾ Measurement at book value—the cost of assets when purchased or when last revalued—will lead in general to an understatement of both asset and liability stocks, with the impact on the *net* position being influenced by the relative increase in the value of the stocks at home and overseas, along with the average maturity of asset relative to liability stocks. The net position may also depend on the relative importance of acquisitions as opposed to organic investment, since, with an acquisition, the value of goodwill may be written off immediately, thereby causing the book value instantly to be less than the market value.

There are several ways of approaching the problem of revaluing direct investment stocks to translate them into current prices. One of the simplest in terms of data availability is to disaggregate the asset stocks by country and revalue them over time using appropriate share price indices. Since the growth rate of UK stock prices has in general outstripped (in local currency) those of the countries which are the major hosts of UK FDI, this approach yields the result that the 'true' net asset position may be *less* advantageous than presently recorded. This approach may be flawed, however, in two respects. First, it is distorted to the extent that domestic share prices themselves embody an allowance for prospects in countries which play host to UK overseas investment, and similarly for overseas stock markets. (An alternative approach is to consider the direct investment assets in terms of their replacement costs, rather than their market values. The drawback with such a replacement cost approach is that it fails to account for movements in the value of intangible assets: brand loyalty, for example, is something that is accumulated over time and thus will feature more highly in 'mature' overseas direct investment.) Second, since the share price approach involves the revaluation of existing stocks and then the addition of new investment flows, it is undermined to some degree by

the use of flow figures which do not capture the acquisition of an overseas company's equity prior to the stage at which it is deemed to constitute direct investment in that company. This problem could be overcome by *reclassifying* those individual *portfolio* transactions which have been augmented subsequently by sufficient share acquisitions to turn the shareholding into a controlling influence.

Such a revaluation exercise is highly complex. This very complexity, however, suggests that some caution should be attached to statements asserting that any upward bias to the net asset stock position stemming from the balancing item will be offset by a downward bias in the measurement of the net direct investment stock. At this stage, the direction of the latter bias is far from clear.

Portfolio investment

The net stock of identified non-bank portfolio investment⁽⁴⁾ rose by more than £37 billion in the year ending December 1989 (Table B). The (asset) stock of portfolio investment overseas held by UK residents rose by £62 billion, while the (liability) stock of overseas investment in the United Kingdom rose by £24 billion (Table D and Chart 4). Around one half of the increase in UK investment abroad represented revaluations, with outflows totalling £30 billion. For overseas investment in the United Kingdom, the increase was also evenly divided between revaluations and inflows of £11 billion. It should be noted that the above are *recorded* figures, but that this area is believed to account for many of the errors and omissions known to exist in balance of payments statistics.

Table D
Non-bank^(a) portfolio investment: change in asset and liability stocks

£ billions: revaluation effects in italics	1985-88		1989	
	(annual averages)			
Investment overseas by UK residents				
Bonds, preference shares etc	3.2	-0.7	14.0	2.3
Ordinary shares	10.7	7.0	47.6	28.9
Total	13.9	6.2	61.5	31.2
Overseas investment in UK company securities				
Bonds, preference shares etc	3.6	-0.2	8.9	1.0
Ordinary shares	6.9	1.7	15.2	11.7
Total	10.5	1.5	24.1	12.7
Overseas investment in UK government stocks				
British government stocks	2.5	-0.1	-2.3	-0.4
<i>Memorandum item: Sample of revaluation variables for 1989</i>				
<i>Percentage changes end-1988 to end-1989</i>				
<i>\$/£ exchange rate</i>			-11	
<i>£ effective exchange rate</i>			-12	
<i>UK 20-year gilt price</i>			-6	
<i>US 30-year bond price</i>			+13	
<i>UK share price</i>			+30	
<i>World share price^(b)</i>			+22	

(a) Non-bank as defined in footnote (d) to Table B.

(b) Excluding the United Kingdom; local currency terms.

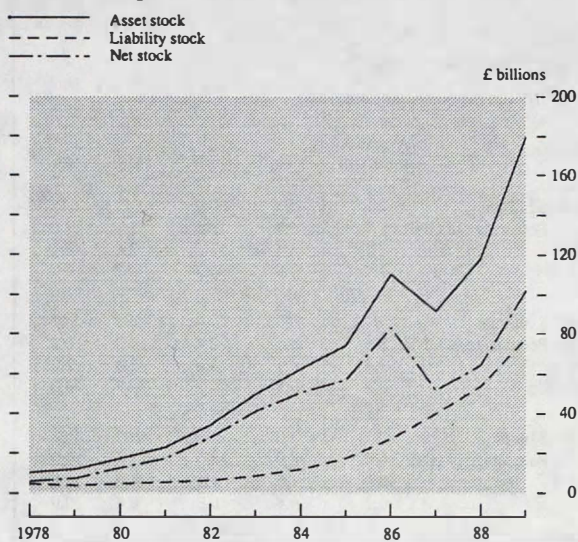
(1) The methodologies used in the United Kingdom and the United States are believed to be the most similar, but even their figures differ substantially. An extreme example of this is the figures for the flow of investment from the United States to the United Kingdom in 1988: US data suggest the flow was \$4.7 billion while UK data suggest a mere \$16 million.

(2) An IMF Working Party has been formed this year to investigate the measurement of international capital flows.

(3) This problem has gained prominence this year from the decision by the US Bureau of Economic Analysis to suspend publication of the bottom-line figures for the US external asset position, claiming that stock valuation discrepancies cause them to be misleading.

(4) The investment is non-bank in so far as it excludes outward investment by UK banks in overseas securities and excludes the estimated take-up of UK banks' bonds by the overseas sector.

Chart 4
Non-bank portfolio investment stocks



Regarding the revaluation elements, both domestic and world equity prices rose strongly in 1989, with the former experiencing slightly the more rapid growth (30% against 22%).⁽¹⁾ Despite this, share price movements provided a net positive contribution to the change in UK net external assets of approaching £10 billion during 1989. This can be explained by the comparative sizes of the gross equity asset and liability stocks: gross equity assets, at more than £140 billion at end-1989, were some £90 billion higher than corresponding gross equity liabilities. In the first half of 1990, world (and in particular Japanese) stock markets dropped sharply relative to domestic equity markets, reversing the equity capital gains made on the United Kingdom's net external assets during 1989.

The weakness of the UK bond market, allied with the strengthening of US bond prices during 1989 (offset in part by the weakness of German and Japanese bond markets), resulted in a net positive revaluation effect from bond price movements of around £3 billion in 1989. In the first half of 1990, the domestic bond market fell much in line with the world average, making the net effect of relative bond price movements upon the United Kingdom's net external assets negligible during the first six months of 1990.

The growth in the (asset) stock of UK portfolio investment abroad is spread quite evenly across assets and institutions, although other financial institutions' and other non-bank residents' investments have risen somewhat more rapidly than those of banks. For liabilities, however, the growth in the stock of overseas investment in the United Kingdom is centred on UK company securities, with holdings of UK public sector securities showing small decreases (largely owing to the government buy-back of gilts).

Details on components of portfolio stocks

In the ten years since the abolition of exchange control, the net stock of portfolio investment has increased almost

continuously. The main divergence from this path was the repatriation of overseas holdings following the October 1987 stock market crash. This repatriation led to a net inflow of portfolio investment in 1988, but the relative stock position remained overwhelmingly outward. The fall in the asset stock in 1987-88 has since been more than reversed, and the recorded net position of portfolio stocks is now stronger in nominal terms than it was before the crash (see Chart 4). Inward portfolio investment is, however, one area where it is believed that flows—and hence, in most cases, stocks—are significantly underrecorded (see the note on page 497), although recently there have been significant improvements in data collection methods. For example, as of the 1990 Pink Book, a number of new data sources and techniques have been put into operation (details of which are in subsequent sections), including a share register survey, full balance sheet reporting by securities dealers and a statistical adjustment to investment in UK corporate bonds.

Outward portfolio investment was again very strong in 1989, primarily reflecting OFIs' acquisitions of overseas company securities. The rise in holdings of overseas company securities has occurred at the same time as a net disposal of UK gilts, which has emerged as the UK gilt market has contracted. This increase in OFIs' holdings has been concentrated in the hands of pension funds as it was in 1988, although insurance companies and unit trusts have now also expanded their holdings significantly. The OFIs also increased their holdings of overseas *government* securities in 1989, but this increase was only one sixth the size of the *fall* in their holdings of UK gilts.

For inward portfolio investment, a significant statistical adjustment has been made to account for the unrecorded overseas acquisitions of UK bonds. Of the £12.6 billion gross portfolio inflows in 1989 (including investment in UK banks' bonds), for example, £9.1 billion was investment in corporate bonds, and around three quarters of this was the result of the statistical adjustment. These adjustments to flows feed into the calculated stock figures. The intention of this adjustment is to reconcile the difference between the rapid growth in new bond issues in the United Kingdom and the modest growth in the identified take-up abroad.

Elsewhere, inward portfolio investment has been influenced by calls on several major share issues, notably the final calls on BP and British Steel and the first call on water privatisation. As much as 10% to 25% of these shares has been purchased by the overseas sector. In addition, certain large takeovers have entered the portfolio figures; even a purely foreign takeover (ie the purchase of one overseas company by another) will lead to a cross-border portfolio investment flow (a reduction in UK assets) if some of the original shareholders are UK residents, and similarly there can be a reduction in UK liabilities in the case of a domestic UK takeover if some of the original shareholders are non-residents.

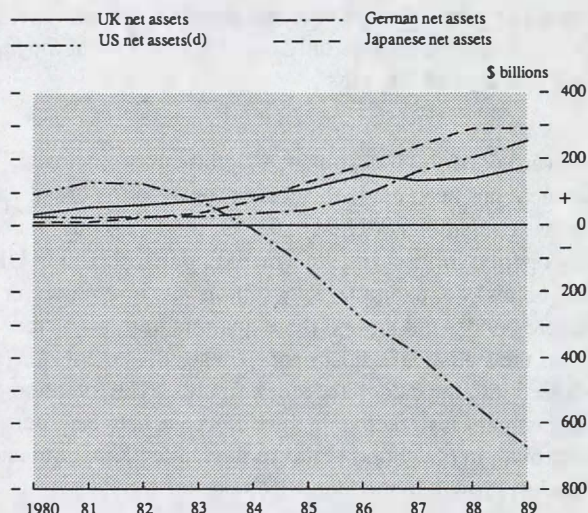
(1) The UK index quoted is the FT 500, while for the world it is the FT index for the 'world excluding the United Kingdom' in local currency terms.

International comparisons

Although the rise in UK net assets in *dollar terms* was less pronounced than in sterling terms—owing to the depreciation of sterling against the dollar over the period—the end-1989 level of net assets of \$174 billion (excluding gold) was nonetheless a record high. As a percentage of GNP, however, the net asset stock, at 22%, was lower than in the period between 1984 and the 1987 stock market crash (which reduced the stock as a percentage of GNP by six percentage points).

A similar analysis for the largest industrial countries (shown in the chart and the table) reveals that US net liabilities increased substantially during 1989, both in dollar terms and as a percentage of GNP, reflecting net capital inflows of \$88 billion, together with adverse net revaluation effects of \$45 billion. Japanese net assets rose scarcely at all in dollar terms, whereas in yen terms they rose by 16%—a consequence of the yen's sharp depreciation against the dollar. For Germany, as the deutschemark appreciated against the dollar, German net assets rose more in dollar terms (25%) than in deutschemark terms (19%) (these figures referring to West Germany only). It should be noted, however, that such country comparisons may be distorted by methodological differences in international data collection.

International comparisons of external net asset positions^{(a)(b)(c)}



- (a) Net external assets are only one component of net national wealth, the relative size of which varies from country to country. In the United Kingdom, net external assets (including gold) have averaged less than 5% of net national wealth over the 1980s.
- (b) Excluding gold holdings.
- (c) The data underlying this chart are taken from national sources which may use disparate methodologies.
- (d) The United States has suspended the figures for the total net asset stock due to discrepancies in the basis of valuation: the figures shown above have been inferred from the (published) components of US net assets.

A wider comparison reveals that, while the net external positions (positive or negative) of the major countries are large in dollar terms, when taken as percentages of GNP they are much less pronounced than those of many of the *smaller* developed countries. As a consequence, net IPD is also much more moderate as a percentage of GNP—positive and typically less than 1% for each of the G3 countries and the United Kingdom, compared with net IPD deficits of upwards of 3% for countries such as Denmark, Australia and New Zealand.

International comparisons^(a)

Percentages of GNP (unless otherwise stated)

	Average 1980-1985	1986	1987	1988	1989
United States					
Net asset level: \$ billions	48	-285	-389	-542	-675
Percentage of GNP	1.7	-6.7	-8.6	-11.1	-13.0
Current balance	-1.1	-3.4	-3.6	-2.6	-2.1
of which, IPD	1.4	0.8	0.7	0.7	0.7
Japan					
Net asset level: \$ billions	47	179	240	291	292
Percentage of GNP	3.5	8.6	8.4	9.9	10.7
Current balance	1.4	4.3	3.6	2.8	2.0
of which, IPD	0.2	0.5	0.7	0.7	0.8
Germany					
Net asset level: \$ billions	31	90	162	203	254
Percentage of GNP	4.6	8.9	12.6	17.0	19.0
Current balance	0.6	4.5	4.1	4.2	4.6
of which, IPD	0.2	0.4	0.3	0.4	0.9
United Kingdom					
Net asset level: \$ billions	71	151	134	140	174
Percentage of GNP	15.4	26.3	16.8	16.4	21.0
Current balance	1.3	—	-1.0	-3.2	-3.7
of which, IPD	0.6	1.3	0.9	1.1	0.9

(a) See footnotes to chart.

Balance sheet compositions compared

Marked contrasts in balance sheet composition emerge between the four countries. Stocks may be split into two types of investment, loosely defined as 'short-term' banking-type assets and 'longer-term' direct and portfolio investment assets (where long-term assets are defined as assets with long maturities rather than assets which investors are expected necessarily to hold over a long horizon). On this basis, the United Kingdom has a large net stock of long-term assets along with (smaller) net short-term liabilities, whereas Germany has a moderate (but increasing) net stock of long-term assets and a larger net stock of short-term assets. Japan is similar to the United Kingdom, except that its net stocks of long-term assets and short-term liabilities are relatively much larger. The United States is rather different, having total net *liabilities*, to which overseas short-term and long-term investments in the United States contribute approximately equally. The effect of these patterns of holdings on IPD flows will be influenced by factors such as the shape of the yield curve and the relative balance between net assets denominated in domestic and in foreign currency.

Compositional effects explain a significant part of the cross-country differences in the relationship between movements in net asset positions and current account balances. The current account deficit in the United States, although falling as a percentage of GNP, has remained large, causing net external liabilities to increase. In contrast, the deterioration in the United Kingdom's current account during the late 1980s was accompanied by a rising net external asset stock: this is somewhat counterintuitive, but is explicable in terms of the United Kingdom's large net stock of capital uncertain assets which in general have yielded capital gains more than sufficient to offset the new net capital inflows. Japan and Germany both have strong current accounts and rising net external assets—essentially because both have positive net stocks of capital-uncertain assets, along with a continuing stream of net capital outflows.

Indirect capital controls in the EC

Following the abolition of exchange controls in the United Kingdom in 1979, great progress has been made within the EC more generally in dismantling obstacles to free capital movement, largely under the impetus provided by the 1988 Capital Liberalisation Directive. 1990, for example, has seen the removal of remaining direct exchange controls in France and Italy and the abolition of Belgium's dual foreign exchange market. Much less attention, however, at least until recently, has been directed towards identifying potential indirect or 'latent' capital controls within the Community;⁽¹⁾ for example, excessive 'prudential' restrictions on the proportion of institutional investors' portfolios given over to foreign or foreign currency denominated assets. Significantly, the Capital Liberalisation Directive calls for the removal of all capital restrictions, whether *overt* or *covert*, which unnecessarily discriminate between domestic and foreign assets or parties conducting a capital transaction.

Indirect capital restrictions are believed to be especially widespread in relation to institutional investors (ie pension funds, life insurance companies etc) which, given their position as the dominant channel for individual investors' long-term savings, suggests that these restrictions could potentially be inhibiting the free movement of a large volume of funds. Such indirect restrictions, therefore, may penalise both the investing institutions and, indirectly, individual investors.

Banking business

Gross outstanding liabilities to the overseas sector intermediated through UK banks rose by £101 billion in 1989, while assets (including banks' holdings of overseas securities) rose by £89 billion (Table B).⁽²⁾ A little under half of the rise in both assets and liabilities was due to new outflows/inflows, with the remainder reflecting (mainly exchange rate) revaluations. The high gross flows in both directions underlying the net inflow continue an already well-established pattern, characteristic of countries whose banks are heavily involved in eurocurrency banking and, as such, especially pronounced in the United Kingdom. The broad symmetry in the exchange rate revaluations between the gross asset and liability stocks reflects currency-matching within banks' balance sheets.

Although the level of intermediated transactions has continued to grow worldwide, its share of total transactions has been eroded by the rapid growth in disintermediated flows.⁽³⁾ This is probably a consequence of two factors:

first, global capital market liberalisation, which has made it easier for individuals to borrow directly from overseas; and second, an increase in the relative costs associated with banking transactions (absorbed only in part by the banks through lower margins), as banks strive to adjust to more onerous capital adequacy requirements and perhaps also strive to accommodate the burden of doubtful debts and any associated provisioning.

While these aggregate trends have continued into 1990, there has been a shift *within* banks' balance sheets, reflecting their obligations under the Brady plan. Within this framework, debtor countries, notably Mexico, exchange outstanding debt for bonds. For UK banks exposed to such foreign debt, this leads to a reduction in their overseas lending which is then offset by an increase in their holdings of overseas government bonds. The exchange is not necessarily one-for-one as some debt may be written off. In statistical terms, these Brady plan transactions are more akin to breaks in series than behavioural changes.

The implications of the balancing item

The balancing item is covered in a supplementary note on page 497, which contains details on its sign and size, its possible origins and the steps that are being taken towards its correction. As well as being a major concern in its own right, however, implying large errors in at least some and possibly many balance of payments flows, the existence of a large balancing item also serves to throw doubt on the accuracy of the recorded figures for both the stock of net external assets and IPD flows. This is of concern, since the net asset stock may be thought of as an indicator of the expected stream of future IPD flows and thereby influences any assessment of the size and persistence of current account deficits which a country can comfortably withstand.

Any underrecording of capital account inflows will be transmitted to the stock figures if these are derived by cumulating new investment flows (and adjusting for revaluation): this mismeasurement of stocks will be transmitted in turn to IPD flows if these flows are derived as this stock multiplied by a rate of return.⁽⁴⁾ Broadly speaking, IPD flows measured in this way include the earnings on portfolio investment of the personal and company sectors.

Moreover, this potential underrecording of IPD outflows and hence overrecording of net IPD earnings carries with it the consequence that, other things being equal,⁽⁵⁾ the current account deficit and thus net capital inflows may be greater than recorded. Hence the balancing item itself may understate the extent of the errors and omissions in other

(1) The Commission of the European Communities has recently begun to address this issue, with a view to bringing action against countries believed to be violating the Capital Liberalisation Directive.

(2) These figures are based on the definitions given in footnote (d) to Table B.

(3) 'Disintermediated' flows are those which do not qualify as being direct or portfolio investment and at the same time are not intermediated through the banking system—essentially net borrowing from overseas undertaken independently by the non-bank private sector. The quality of information on such flows tends to be markedly lower than that on intermediated flows.

(4) Moreover, any categories of investment subject to underrecording but whose stocks are measured directly (and independently of capital flows) will result in the breakdowns such as those given in Table A understating the (net positive) revaluation element and understating net capital inflows to the same degree. This is because changes in the directly (and, it is assumed, correctly) measured stocks would embody at least a part of those actual flows which are not captured in the flow data and hence are embodied in the balancing item flow.

(5) There would be some offset of course were part of the balancing item the consequence of unrecorded net credits within the non-IPD current account.

parts of the balance of payments. The possible extent of the problem is evident, given a cumulative balancing item of £46 billion since 1983, a rise in UK share prices of around 150% (implying there to have been a positive revaluation over the period) and an IPD rate of return upwards of 3%. Thus, while the presence of the balancing item does not necessarily mean that the United Kingdom is borrowing from overseas at 'zero apparent cost', since IPD flows may be measured quite independently of investment flows, there are almost certainly some contagion effects between the balancing item and the stock of net external asset and IPD figures.

Interest, profits and dividends

Net interest, profits and dividends (IPD)—the net income the United Kingdom derives from its stock of net external assets—amounted to £4.6 billion in 1989, £0.4 billion less than in 1988 (Table E). In general terms, this contraction in net IPD during 1989 can be traced to compositional shifts within the United Kingdom's external balance sheet: on the assets side, the stock of capital-uncertain portfolio investment which carries a *low running yield* grew rapidly during 1989; while on the liabilities side, it was the stock of *high-yielding* capital-certain monetary sector liabilities that rose most rapidly. The effect of these movements in stock composition was to widen the differential between average IPD returns on gross liabilities and gross assets from 0.2% to 0.5% between 1988 and 1989 (Table H), hence depressing net

Table E
Interest, profits and dividends

£ billions

	Annual average	1988	1989	1990H1
	1982-1987			
Earnings on assets				
Portfolio(a)	2.2	3.0	4.1	2.6
Direct	7.9	14.3	17.5	7.7
Other non-bank private sector	1.6	1.8	2.7	1.6
Public sector(b)	0.8	1.5	1.9	1.0
UK banks' spread earnings on external lending	2.3	1.9	1.8	0.6
Total	14.8	22.5	28.1	13.5
Payments on liabilities				
Portfolio(a)	0.7	2.3	3.8	2.5
Direct	6.0	8.5	9.1	3.7
Other non-bank private sector	1.6	1.9	3.4	1.8
Public sector(c)	1.6	2.3	2.4	1.2
Banks' cost of net liabilities	1.7	2.5	4.8	3.1
Total	11.5	17.5	23.5	12.3
Net IPD earnings	3.3	5.0	4.6	1.2
Net IPD excluding spread earnings	1.0	3.0	2.7	0.6

(a) Non-bank private sector.

(b) Including official reserves.

(c) Including gilts.

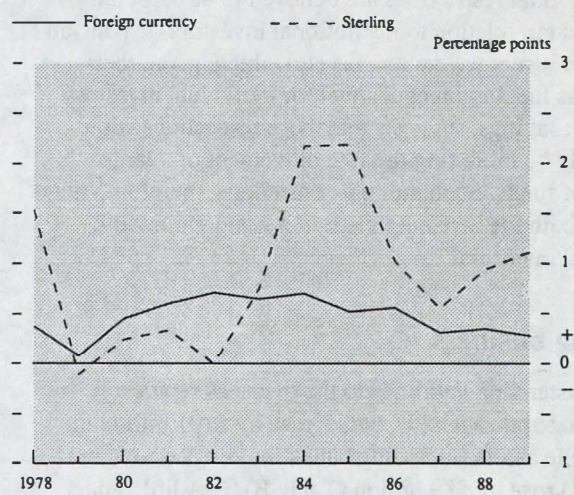
IPD, and more than offsetting the apparently beneficial impulse arising from the increase in the United Kingdom's net external asset position overall. This pattern continued into the first half of 1990, with net IPD falling further below its 1989 quarterly average.

Monetary sector earnings

Within the IPD balance, net payments overseas by the monetary sector increased sharply to £2.9 billion in 1989 from £0.5 billion in 1988—as might have been expected

given the external asset stock shifts noted above (Table E). A significant rise in the cost of banks' net external liabilities (ie the cost of net borrowing from overseas undertaken on behalf of the non-monetary private sector) accounted for the greater part of this rise in banks' net external interest payments (£2.3 billion), with a further small effect (£0.1 billion) reflecting the contraction in the monetary sector's spread earnings (ie the profit earned on the gross external asset stock from the differential between lending and borrowing rates of return)—Tables E, F, and G; Charts 5, 6, and 7. Substantial net inflows of £12.0 billion into the UK banking system from overseas during 1989, both in sterling and in foreign currency, raised markedly the monetary sector's net external liabilities. At the same time, the cost of maintaining this stock was increased by higher interest rates, both at home and overseas: average IPD returns on monetary sector assets and liabilities rose

Chart 5
Calculated margins on UK banks' international lending



significantly between 1988 and 1989 (see Table H). The combination of increased liability stocks and higher returns payable on these stocks, together with a fall in the exchange rate, has had the effect of increasing banks' net payments to the overseas sector during 1989; indeed, this feature appears to have been central to the worsened outcome for net IPD in 1989 (see Chart 6), and continued in a broadly similar vein in the first half of 1990.

Table F
UK banks^(a) estimated spread earnings in 1989

£ billions, percentages in italics

	Foreign currency	Sterling	Total
Net interest income(b)	—	-3.0	-2.9
Estimated cost of net liabilities(c)	1.3	3.4	4.8
Costs of funds (d)	8.3	12.2	8.7
<i>equals</i>			
Implicit spread earnings	1.4	0.5	1.8
Implied margin (e)	0.3	1.1	0.2

(a) UK monetary sector plus certain other financial institutions.

(b) Including income from holdings of foreign bonds and export credits; excluding direct investment earnings.

(c) Cost of net liabilities = rate of return on liabilities multiplied by the average stock of net liabilities.

(d) Equals calculated average cost of all liabilities

(e) Equals implicit spread earnings as a proportion of the (average) asset stock.

Chart 6
Interest, profits and dividends

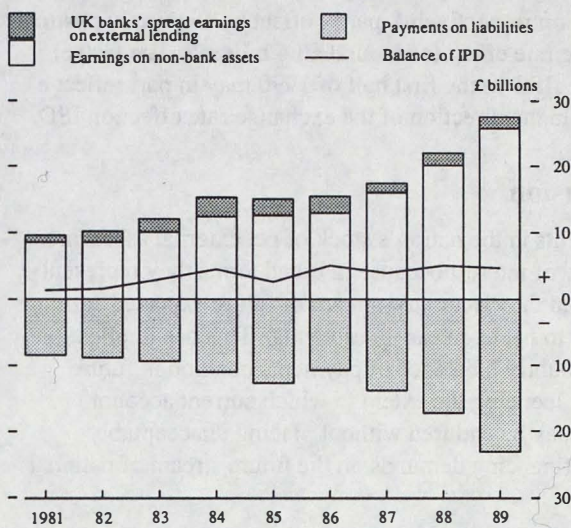


Table G gives the monetary sector's net contribution to the invisibles balance; that is, net interest earnings plus net earnings from overseas affiliates and net bank fee income (the latter appearing in the services, not the IPD, account). A sharp turnaround in banks' net direct investment earnings, to a surplus of £0.5 billion in 1989 from a deficit of £0.3 billion in 1988, together with a rise in the monetary sector's net fee income, by £0.2 billion to £1.5 billion, was insufficient to offset the fall in banks' net income from intermediation during 1989: UK banks' total income from external transactions amounted to *minus* £0.9 billion in 1989, compared with a positive balance of £0.5 billion in 1988. With a large proportion of the identified financing of the current account deficit being intermediated through the UK banking system during 1989, however, this depression in banks' net external income was not unexpected.

Direct investment earnings

The United Kingdom's net direct investment earnings rose by £2.5 billion to £8.3 billion in 1989, indicating that external income from this source continues to provide the backbone of the IPD account. This is largely the result of the scale of the United Kingdom's net direct investment overseas over a number of years, particularly recently, along with the declining exchange rate. During 1989, the net stock of direct investment assets increased by a further £14 billion

Table G
UK banks^(a) income from external transactions

	Annual averages		1988	1989	1990H1
	1976-81	1982-87			
Net IPD earnings:(b)					
Foreign currency	0.1	0.1	0.7	—	-0.1
Sterling	-0.1	-0.2	-1.3	-3.0	-2.3
Sub-total	—	-0.1	-0.5	-2.9	-2.5
Direct investment earnings	—	—	-0.3	0.5	0.5
Fee income	0.1	0.2	1.3	1.5	0.7
Total net income	0.1	0.2	0.5	-0.9	-1.3

(a) See footnote (a) to Table F.

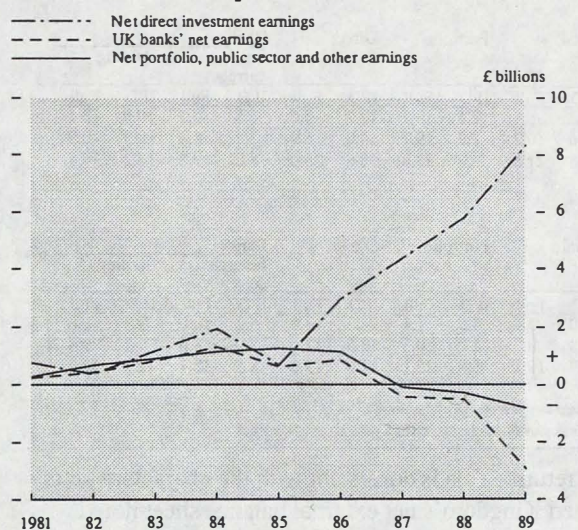
(b) See footnote (b) to Table F.

to £59 billion. Heavy inward investment in UK oil companies and a recovery in North Sea production caused oil-related IPD debits to grow faster than corresponding credits, depressing UK oil companies' net direct investment earnings during the first half of 1990. The net effect of the Gulf crisis upon oil IPD earnings in the second half of 1990 is difficult to judge and could work in either direction.

Portfolio investment earnings

Net external earnings from portfolio investment fell by £0.4 billion to £0.3 billion in 1989, despite a significant increase (of £37 billion) in the United Kingdom's net stock of portfolio investment assets during 1989. A reconciliation of these two, seemingly contradictory, movements can be found by looking at relative rates of return on portfolio investment assets and liabilities (Table H). Two features in

Chart 7
Movements in components of IPD



particular are worthy of note: first, the widening of the differential between portfolio IPD returns on liabilities relative to those on assets; and second, the scale of the differential between IPD returns on portfolio investment relative to returns on other classes of investment. In the first respect, the widened differential between portfolio IPD returns on liabilities relative to assets is probably a reflection of the significant shift into high-yielding UK corporate bonds by overseas investors, in particular during 1989.⁽¹⁾ In the second respect, the low *ex post* IPD returns on portfolio investment given in Table H appear to run contrary to expectation given the riskiness of portfolio investment relative to, say, placing funds on short-term deposit with the monetary sector.

Capital gains and 'full' rates of return

Some insight into the second issue is provided if 'full', rather than simply IPD, rates of return are considered—ie the rate of return incorporating both the IPD flows and any capital gains which accrue to capital-uncertain portfolio assets and

(1) An alternative explanation is that the rate of return differential for portfolio IPD is a consequence of mismeasurement: for example the rate of return on liabilities would be overstated were IPD measured correctly while the stock was underrecorded. Moreover, figures for securities dealers suggest their IPD earnings from abroad to be (perhaps implausibly) low in general, and thus greater coverage of their activities in the statistics causes the overall IPD rate of return on portfolio assets to be dragged down.

liabilities (Table H). These full rates of return are, in general, more in line with *a priori* expectations, given the relative riskiness of the various investment classes: portfolio investment full returns, while on average higher than those on other types of investment, are also subject to more marked fluctuation.

A comparison of full and IPD rates of return reveals significantly higher full returns on direct and portfolio investment than corresponding IPD returns during 1989—the result of buoyant stock markets, both overseas and domestically. Indeed, Table H shows that total full asset returns were higher than corresponding total full liability returns in 1989, the opposite pattern to that suggested by IPD

Table H
Estimated IPD^(a) and full^(b) rates of return on identified assets and liabilities

Percentage points

	Totals		Portfolio		Direct		Banks Foreign currency		Sterling	
	IPD	Full	IPD	Fu	IPD	Fu	IPD	Fu	IPD	Fu
	1987	6.7	-8.4	2.5	-13.1	12.2	-5.6	6.5	-9.5	10.0
1988	7.6	10.2	2.9	19.7	14.0	11.9	7.4	8.4	10.3	10.9
1989	8.5	21.5	2.8	23.8	13.6	25.0	8.8	19.2	13.2	14.4

	Totals		Portfolio		Direct		Banks Foreign currency		Sterling	
	IPD	Full	IPD	Fu	IPD	Fu	IPD	Full	IPD	Fu
	1987	7.0	-5.4	4.5	1.1	12.7	13.6	6.2	-10.0	9.3
1988	7.8	8.7	5.0	10.5	13.5	12.1	7.0	8.0	9.2	9.3
1989	8.9	19.1	5.8	25.1	11.9	13.6	8.5	18.7	12.5	12.9

(a) IPD earnings as a percentage of the stock.

(b) IPD earnings plus stock revaluation as a percentage of the stock.

rates of return. This is consistent with the characteristic of the United Kingdom's net external balance sheet noted above—namely a predominance of *capital uncertain* assets and *capital certain* liabilities.

In line with the decomposition of changes in net external assets, changes in IPD flows between different periods can be broken down into three stylised components: that part due to exchange rate movements; that part due to net capital flows; and that part attributable to rate of return variations. Such a decomposition is subject to the same qualifications as attached to the decomposition of stock revaluations given in Table A. Broadly, the £0.4 billion fall in net IPD earnings

between 1988 and 1989 can be traced to strongly *negative* rate of return and capital flow effects (of £2.3 billion and £1.5 billion respectively), partly offset by a strongly *positive* exchange rate effect (of around £3.4 billion). The further fall in net IPD in the first half of 1990 may in part reflect a reversal in the direction of the exchange rate effect on IPD.

Conclusion

Movements in the nation's stock of net external assets are primarily of interest because in broad terms they represent changes in the discounted stream of future expected earnings accruing to net overseas investments. This has implications for the country's balance of payments position in future years, influencing the extent to which current account deficits may be endured without placing unacceptably onerous financing demands on the future stream of national income.

In the case of the United Kingdom, the proceeds from the current account surpluses of the early 1980s were largely invested in assets overseas, such as portfolio and direct investment, characterised by carrying a relatively low IPD return but generally high capital gains. The deficits which emerged in the latter half of the 1980s can be interpreted as being financed by capital-certain borrowing, implicitly secured against the existing stock of assets.

Widespread concern attaches to the potential mismeasurement of this stock position, particularly with regard to the balancing item. Hence, while the United Kingdom's net stock of assets provides some reassurance on the country's ability to endure trade deficits on its current account, the extent of this reassurance may be overstated by the recorded net asset figures.

This problem of measurement serves to compound the already complicated task of evaluating the future cost (in terms of IPD payments) of current deficits. Of major importance in this task are interest rate differentials—with the United Kingdom currently paying more on its liabilities than it receives on its assets—in particular those resulting from risk premia effects, which effectively represent a deadweight cost. By definition, any changes which reduce the implied risk premium will be helpful in alleviating the cost of deficit finance.

Problems associated with balance of payments statistics

The nature of the balancing item

In principle, the balance of payments always balances—if there is a current account deficit (surplus), there will be an equal capital account inflow (outflow). As measured by the available statistics, however, there is not an exact balance and a balancing item is required. This item reflects the net sum of all errors and omissions. The significance of such a ‘catch-all’ item is that it indicates an imprecision in the analysis of behaviour and developments in the external accounts. Since 1975, the annual balancing item for the United Kingdom has been positive in every year except 1982. A positive balancing item implies either or both unrecorded net credits in the current account (an overestimate of the size of the current account deficit, for example) and unrecorded net inflows in the capital account. In every year since 1984, the balancing item has been equivalent to at least 0.9% of nominal GDP, reaching £15 billion, or 3% of GDP, in 1989. On a quarterly basis, however, the balancing item remains highly volatile (Chart 8). Since 1985, the mean absolute difference in adjacent quarters in the balancing item has been around £5 billion. Any explanation of where the errors and omissions in the accounts may lie needs to be consistent with both the absolute size and the volatility of the balancing item. The search for an explanation is not, however, a search for one particular missing item; instead it is the whole statistical system which is subject to error and which will exhibit discrepancies of varying size.

Chart 8
Balancing item: annual and quarterly

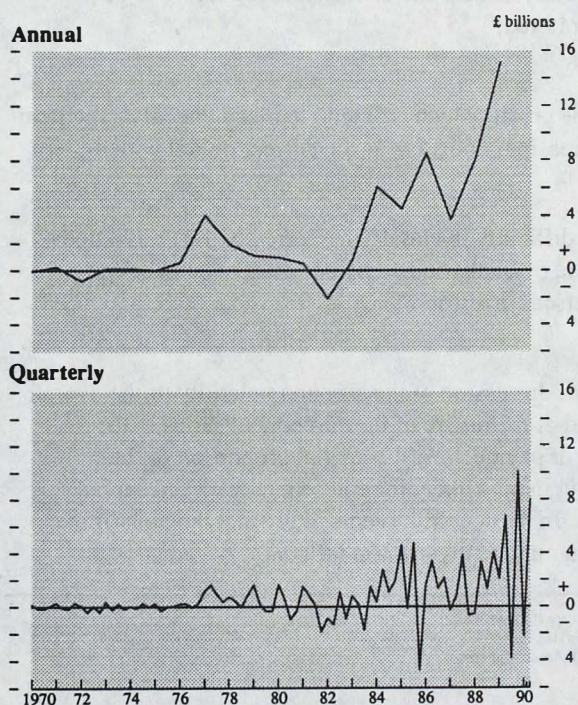
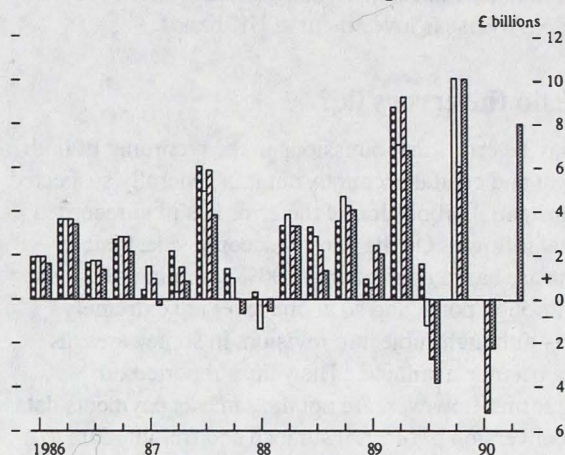


Chart 9
Successive estimates of balancing item since 1986^(a)



(a) For each quarter, the columns show the balancing item published in the four most recent quarterly balance of payments press releases. The furthest right-hand side column in each block gives the latest published figure.

Prior to 1975, the annual balancing item fluctuated in sign and absolute size. It was generally quite small and its quarterly variation partly reflected seasonal factors. Since 1975, the balancing item has become increasingly positive, and most of the seasonal pattern is effectively masked by this general increase (although the item is still typically larger in the second and fourth quarters). In the earlier period, the balancing item's behaviour would suggest that it mainly captured mismatches in the timing of the recording of various capital and current account flows, and thus no persistent trend emerged. Such timing issues no doubt persist, but they appear now to be dominated by structural underrecording of flows. The issue is further complicated by the frequency and extent of revisions to the series as fuller information becomes available (see Chart 9). Typically, the balancing item is revised both up and down in subsequent years, as the recorded flows of gross capital account transactions in particular are updated. These changes are often offsetting over a period of years, although recent improvements have reduced the balancing item and raised estimated portfolio inflows for the period 1986–88 (the cumulative balancing item for these three years being reduced from £35 billion in the 1989 Pink Book to £20 billion in the 1990 Pink Book).

In fact, there have been some changes to the stock data for earlier years on both sides of the account since the November 1989 *Bulletin* article, in part reflecting improvements to sources and methods of calculation. The stock of UK investment abroad in 1988 has been revised slightly, primarily because of an upward adjustment to OFIs' holdings of bonds, preference shares etc. On the liability side, the stock of overseas portfolio investment in the United

Kingdom has been revised upwards by £19 billion, principally reflecting revised estimates of overseas holdings of UK company securities, but also an increase in holdings of British government foreign currency notes. These revisions to the liability stocks are reflected in increases in the flows of overseas investment into the United Kingdom. The changes to the back data for inward portfolio investment stocks largely reflect a *statistical adjustment* to the series from 1986, to take account of additional assumed (but unrecorded) overseas investment in UK bonds.

Where do the errors lie?

There may be errors and omissions in the recording of both the current and capital accounts, but it is generally suspected that a substantial proportion of the error lies in unrecorded net capital inflows. On the current account side, visible trade data are based upon almost 100% sampling of goods passing through ports, and so at one level are extremely accurate—although subject to revision, in some cases, as later data become available. The values reported on shipping forms, however, are not the same as payments data and the conversion of 'cost, insurance and freight' data to a 'free on board' basis is estimated. Moreover, the Bank's own experience during the period of exchange control suggested that trade account figures for visible imports may be overstated, despite the fact that there was then presumably an incentive to over-invoice imports and under-invoice exports in order to circumvent controls on exports of capital. Now, however, the incentives to misrecord are much less.

Data on services may account for some of the errors: some services data are based on projections or on surveys which may be out of date and/or unreliable. The United Kingdom's external trade in services is, however, much smaller than visible trade. IPD data are subject to potentially considerable mismeasurement. While the majority of recorded IPD flows pertain to operations involving banks or the UK public sector, and are considered to be reasonably reliable, transactions between the non-bank private sectors in the United Kingdom and overseas are much less reliable. The recorded levels of these transactions are substantial (in 1989 credits were £24 billion and debits £16 billion), so any errors may similarly be quite sizable. Lastly, within the current account, data on government transfers is reliable but the coverage of private transfers is much less complete; again, however, the error is unlikely to be of sufficient size for it to be a major explanation.

Notwithstanding the potential errors in the current account, it seems likely that the explanation for the majority of the balancing item lies in the capital account. The scope for error in the data for the capital account is manifold. For example, there is no information at all on some areas such as trade credits between unrelated companies; reliance is often

made on surveys with no statutory base and thus less than 100% response (although statutory surveys are not necessarily more accurate), the value of which depreciates sharply in times of rapid financial innovation because much of the data is based on the records of intermediaries which are by-passed by direct transactions; the complicated structure of deals may obscure the residency status of the parties involved; coverage of transactions involving offshore intermediaries (such as those in the Channel Islands and the Isle of Man) is far from complete; and transactions are often inferred from changes in asset and liability stocks which include valuation changes (exchange rate effects, write-offs etc.).

This explanation of the source of the balancing item is also supported by exercises in balancing the national accounts,⁽¹⁾ the aim of which is to allocate the apparent errors to their 'most likely' sources. Each study has allocated a substantial proportion of the balancing item to parts of the capital account.

For the capital account, the basis upon which the figures are constructed is less secure than it was prior to the abolition of exchange controls. The methodology now employed is arguably more likely to lead to a serious under-estimation of inflows rather than outflows, although the errors in both directions could be substantial. This direction of bias is likely because (mainly portfolio) outflows are presumed to be better captured by the direct reporting by financial institutions than are inflows which are only recorded indirectly by banks and securities dealers which act as agents for overseas investors. The most probable sources of mismeasurement include:

- the overseas take-up of new (non-privatisation) issues, which has been notably greater in recent years than in the early 1980s, and is only just beginning to be monitored;
- trade credit, which will tend to make the balancing item increasingly positive as the current deficit widens; and
- the difficulty in classifying correctly the transactions made by banks and securities dealers on behalf of overseas investors.

From this discussion of the size and volatility of the overall error and of the nature of the component series in the balance of payments, a substantial proportion of the balancing item is likely to represent unrecorded capital inflows. In particular, it seems likely that the bulk of the omission may lie in *portfolio* inflows.

(1) CSO, 'An investigation into balancing the UK national and financial accounts 1985-87', *Economic Trends*, No 424, February 1989. M Weale 'Asymptotic maximum-likelihood estimation of national income and expenditure', Department of Applied Economics Working Paper 8913, University of Cambridge. G P Dunn and D M Egginton, 'Balancing the national accounts: an asymptotically maximum likelihood approach using trends' Bank of England *Discussion paper Technical Series* No 27, April 1990.

Improving the quality of balance of payments data

The benefits of improving the accuracy of statistics need to be balanced against the costs to and burden upon the business sector in so doing. It is inevitable that with modern corporate structures, and with no exchange controls, not all transactions can be easily recorded. A realistic balance is the best that can be achieved. A number of data problems have been addressed, specifically with the objective of improving the quality of the UK balance of payments statistics.⁽¹⁾ Principally, these relate to portfolio investment: first, portfolio investment and its financing are the subjects of a new reporting system for securities dealers; and second, work has been undertaken on estimating omissions in the current methods of measuring inward portfolio investment in UK corporate securities.

For *securities dealers*, a regular statistical reporting system was introduced as of the second quarter of 1989. Previously, information had been provided in the form of basic portfolio investment returns. The system covers securities dealers' funding by way of transactions with non-banks abroad. The data indicate that the newly incorporated flows of securities dealers transactions are large, volatile and unevenly distributed. (Also, since the fourth quarter, new

'grossing-up' procedures have been adopted, which in principle should improve consistency with The Securities Association reporting panel.)

Improvements in the recording of inward portfolio investment in *UK corporate securities* are also in train. More information has now been obtained about overseas primary take-up of UK corporate bonds, suggesting that previous estimates, based on the portfolio investment returns, considerably understated the size of this item. These statistical revisions, based on indirect evidence from data on total bond issues, originally added £9.1 billion to inward portfolio investment in 1989, although this has been revised subsequently to £7.5 billion.⁽²⁾

Supplementary information has also been sought about overseas take-up of *new issues* of UK shares. Other steps being taken to improve statistics include: the commissioning by the CSO of a UK share ownership survey—which has implications for related IPD debits (preliminary results from which are included in the 1990 Pink Book); revisions of the panel of banks and securities dealers reporting on the portfolio investment return; and a review of banking statistics, which will provide quarterly reporting of banks' net earnings from services overseas.

(1) The CSO has undertaken a Review of Balance of Payments under the auspices of the Chancellor's Initiative (announced in March 1990). The aim of this review is to identify scope for improvements throughout the balance of payments statistics.

(2) These figures include the adjustment for the take-up by overseas of UK banks' bonds.