# The external balance sheet of the United Kingdom: recent developments

This article(1) examines developments in the UK external balance sheet from 1987 to mid 1998. It continues an annual series of articles in the Quarterly Bulletin begun in 1985.(2)

Gross UK assets and liabilities are analysed in order to discern trends in holdings of different types of investment. The article emphasises the latter part of the period, which was characterised by crises in emerging markets. The external balance sheet is also considered in relation to investment income. The box on page 42 describes the recent changeover to the latest (1995) version of the European System of National and Regional Accounts and the 1993 IMF Balance of Payments Manual, Fifth Edition (BPM5).

## **Overview**

The external balance sheet comprises the United Kingdom's investments in the rest of the world (assets) and investments in the United Kingdom from the rest of the world (liabilities).

Table A shows how the net asset position changed from 1987 to mid 1998, and identifies the separate contributions from actual financial flows and valuation effects.

**Table A** Changes in the net asset position

£ billions

|                      | 1987–92<br>(average) | <u>1993</u> | 1994  | 1995  | 1996 | 1997  | to<br>Sept. |
|----------------------|----------------------|-------------|-------|-------|------|-------|-------------|
| Current account      | -14.1                | -10.6       | -1.5  | -3.7  | -0.6 | 6.1   | -0.4        |
| Capital account      | 0.3                  | 0.3         | 0.0   | 0.5   | 0.7  | 0.8   | 0.3         |
| Financial flows      | -12.1                | -9.3        | 7.1   | -0.9  | -1.8 | 6.5   | 14.7        |
| Revaluations (a)     | 6.5                  | 4.6         | -21.3 | -13.7 | -7.7 | n.a.  | n.a.        |
| Change in net assets | -5.6                 | 13.9        | -14.2 | -14.6 | -9.5 | n.a.  | n.a.        |
| Net assets           | 28.3                 | 36.4        | 22.2  | 7.6   | -1.9 | -81.6 | -58.2       |
| Net errors/          |                      |             |       |       |      |       |             |
| omissions (b)        | 1.7                  | 1.0         | 8.5   | 2.3   | -1.9 | -0.5  | 14.8        |

n.a. = not available

Sources: ONS and Bank of England

At the end of 1997, the United Kingdom had a record net external liability of £81.6 billion (11% of GDP),(3) though this masks the rapid growth of both sides of the balance sheet over the year. Gross assets were £1,949 billion, up by 19.3% from £1,634 billion at end 1996. Liabilities were £2,031 billion, up by 24% from £1,636 billion at end 1996. This article looks behind the fluctuation of the net asset position, and investigates developments on both sides of the balance sheet.

The Office for National Statistics (ONS) points out that comparison of the 1997 net asset position with that of

previous years is potentially misleading. This is why the 'revaluations' and 'change in net assets' boxes must be left blank for 1997 and 1998, until 1998 data are published in the next Pink Book.

UK assets at end 1997 were revised downwards by £47.9 billion in the September 1998 First Release, largely because of new data received from the triennial Share Register Survey; the external asset positions for 1996 and previous years will be revised in the next Pink Book. The Share Register Survey data have boosted the ONS estimates of foreign investment in British equities. (The rising share of investment in equities and other portfolio securities on both sides of the balance sheet is highlighted in the next section, 'UK external assets and liabilities'.)

The data discussed in the article are based on the latest published official statistics. They contain substantial revisions to the data published in previous versions of this article. Some of these revisions were caused by receipt of new data from annual and triennial surveys; some were caused by the changeover to the new balance of payments standard, BPM5 (see box on page 42).

The ONS warns of imperfections in measuring the international investment position.<sup>(4)</sup> Direct investment items are recorded at book value rather than at market value, and are therefore underestimated. Stocks of some assets and liabilities are estimated imperfectly by adding identified transactions to the previous level and estimating valuation changes.

For the balance of payments as a whole, every credit entry should be offset by a debit entry. For example, the credit arising from the export of a good from the United Kingdom would be matched by an offsetting debit entry in the financial account, which could be an increase in UK assets abroad (the exporter receives foreign currency in payment), or a decrease in UK liabilities (the non-resident pays for the

<sup>(</sup>a) Revaluations are calculated as the residual element after financial flows have been subtracted from the change in the net asset position published by the ONS.
(b) Net errors and omissions account for the discrepancy between the current and capital accounts and financial flows. Every credit entry in the balance of payments accounts should be matched by an offsetting debit entry, so that total credits equal total debits. In practice, there is a discrepancy (discussed below).

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Previous articles in this series have appeared in November Bulletins. This year's article was delayed to allow incorporation of balance of payments data compiled on the new basis (see the box on page 42).

United Kingdom Balance of Payments, 1998 edition (the Pink Book).

United Kingdom Balance of Payments, 1998 edition, methodological notes (pages 125–30).

goods out of his deposit with a British bank). Total current, capital and financial account credits should be offset by total debits. In practice, there is a discrepancy in the recording of total credits and debits, accounted for by 'net errors and omissions'. The ONS thinks it likely that most of the net errors and omissions total reflects unidentified inflows on the financial account (as opposed to the current account), probably foreign investment in British corporate bonds, which is difficult to measure directly.

The next section, 'UK external assets and liabilities', analyses the balance sheet into its components, first highlighting the rising share of portfolio investment, and the declining share of deposit-taking and lending. Second, it looks at the evolution of the UK reserve asset position over the period. Third, it uses the most recent direct investment data, and banking data from the Bank's Monetary and Financial Statistics Division, to examine some of the implications of recent economic slowdowns in emerging markets.

The third section, 'Investment income and the UK external balance sheet', considers the evolution of investment income, part of the current account, in relation to the balance sheet.

Following the standard components of the balance of payments accounts, international investments are classified into four categories:

- Direct investment—acquisition of 10% or more of the equity of an enterprise (implying a degree of ownership or control), and all subsequent financial transactions (equity or debt).
- Portfolio investment—acquisition of less than 10% of the equity or debt of an enterprise.
- Other investment—residual category; mainly deposits and loans, and trade credits.
- Reserve assets—external assets controlled by monetary authorities.

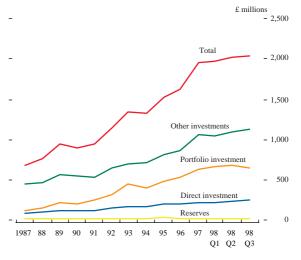
Chart 1 shows the evolution of the United Kingdom's asset and liability positions for each category from 1987 to the third quarter of 1998.

#### UK external assets and liabilities

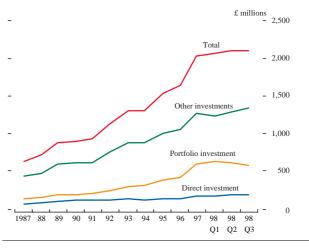
This section explores how the United Kingdom's external assets and liabilities have changed since 1987.

Chart 2 shows that on both sides of the balance sheet, the proportions of portfolio securities have increased substantially since 1987. Portfolio investments represented 17.8% of total assets at end 1987 and 34% of assets at end 1997. Similarly, portfolio investments rose from 20.3% of liabilities at end 1987 to 29.1% of liabilities at end 1997.

Chart 1 UK external assets



#### **UK** external liabilities



Whereas stocks of portfolio investment have been increasing as a proportion of the balance sheet, 'other investment' stocks have been declining, from 66% of assets at end 1987 to 55% by end 1997. Similarly, 70% of liabilities at end 1987 were other investments; by end 1997, the proportion was 63%.

Increases in the stock of portfolio and other investments are composed partly of financial transactions and partly of revaluations of already-held assets and liabilities. Financial account data indicate that acquisitions of portfolio investments, particularly debt securities, are driving the increase in portfolio assets and liabilities. UK residents' portfolio assets increased by £47.9 billion between end 1995 and end 1996. There were recorded equity purchases of £10.5 billion over the year, and debt security purchases of £49.3 billion. So revaluations lowered the stock of portfolio assets and their increase was driven by purchases of debt securities. (Again, the data for 1997 and later are affected by the Share Register Survey results and cannot be compared directly with 1996 data.)

Portfolio liabilities increased by £43.3 billion in 1996. Non-residents purchased £6.1 billion of equities and £44.2 billion of debt securities; revaluations again

# Changeover to ESA95 and BPM5(1)

The European System of National and Regional Accounts (1995) is the basis on which statistics are to be compiled throughout the European Union (EU). Fulfilling the standards of ESA95 is a legal requirement of all EU Member States from 1999. ESA95 is designed to be consistent with the latest statistics collection guidance from the United Nations, the System of National Accounts (1993) and its companion IMF Balance of Payments Manual (BPM), Fifth Edition (1993). BPM5 is particularly relevant to the international investment position statistics used here.

The UK National Accounts were published on an ESA95 basis for the first time in the 1998 Blue *Book.* The international investment position and investment income data were correspondingly published on an ESA95/BPM5 basis in the 1998 Pink Book. The data in this article all use the new basis. The Office for National Statistics revised old data, for some series as far back as 1946. So there is no 'break' in series when the new standards were introduced.

There are five main differences between the old statistical system and the new that are relevant to the balance of payments data.

- Introduction of a new 'Capital Account'. Capital transfers (such as a government investment grant for a project in a developing country) are now separated out and recorded in the capital account, to distinguish them from current transfers in the current account. Debt forgiveness is included in capital transfers; under the old standard, debt forgiveness was excluded from the balance of payments. Acquisition or disposal of non-produced, non-financial assets (such as land or patents) are also now included in the capital account, rather than (as previously) in
- Accruals accounting of interest income. Receipts and payments were previously recorded as they occurred. Reporters are now required to accrue receipts and payments over the lifetime of the underlying asset or liability.

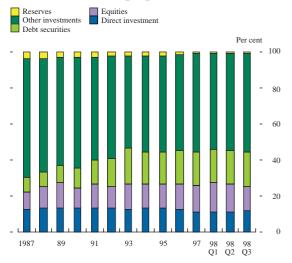
trade in services. The new financial account

broadly equals the old capital account.

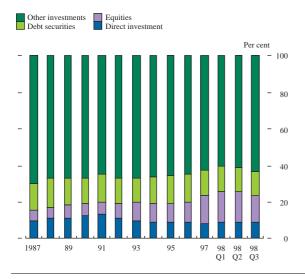
- Redefinition of direct investment.
  - Direct investment was previously classified as a holding of 20% of the equity of an enterprise. The threshold has now been lowered to 10%. Direct investments are identified separately to capture the conceptual distinction between general investment and the acquisition of an 'effective voice' in the running of an enterprise. It is thought that a 10% threshold is a truer indication of such an effective voice than 20%. The ONS believes that the reclassification of the direct investment threshold has had very limited effects on the aggregates.
  - Reclassification of offshore islands as **non-resident.** The Channel Islands and the Isle of Man have been reclassified as non-resident to the United Kingdom. Thus transactions between UK residents and the islands are accounted for in the balance of payments, but transactions between islanders and the rest of the world are no longer counted in the UK balance of payments. The islands are not politically part of the EU, so their official statistics are not under a legal requirement to comply with ESA95. They therefore have to be excluded from the United Kingdom's economic territory to ensure full UK consistency with ESA95. This treatment is also technically consistent with the IMF's recommendations. BPM5 states that 'In a maritime country, economic territory includes islands that belong to the country and are subject to the same fiscal and monetary authorities as the mainland; goods and persons move freely to and from the mainland and the islands...'.(2) The offshore islands are subject to their own fiscal authorities and have their own tax systems. And there are impediments to taking up residency on the Channel Islands. So it is sensible not to consider them part of the United Kingdom's economic territory.
- Separate collection and publication of money-market instruments data. The ONS now publishes these data separately, and as part of the portfolio investment category, rather than as part of other

For further information, see the *Quarterly Bulletin*, November 1998, 'Recent changes to the national accounts, balance of payments and monetary statistics', pages 361–67.
 See BPM5, page 20.

Chart 2 UK external assets—proportions



## **UK external liabilities—proportions**



depressed the total, whose increase was also driven by purchases of debt securities.

These figures suggest a process of disintermediation in cross-border finance. Traditional bank lending has not stopped growing, but portfolio investment is rising more quickly—borrowers are increasingly tending to go straight to lenders by issuing debt or equity. A Bank of England analysis of global figures in 1997 identified an increase in the proportion of international bonds issued by industrial and commercial companies, from around 22% in 1993 Q1 to 52% in 1997 Q4. The analysis argued that US companies, in particular, were seeking to achieve greater name recognition (and thus a more liquid market for their debt) by issuing bonds internationally, rather than relying on the domestic market. The same factors could influence British companies, if anything more strongly, given the smaller size of the British domestic bond market. Furthermore, long bond yields in the United States and Europe have fallen to their lowest levels in decades, making debt cheaper to issue.

This argument can be tested against the sectoral breakdown of data presented in the *Pink Book*.<sup>(1)</sup> Because of the difficulties in measuring inward portfolio investment, the only sectoral breakdowns of liabilities provided by the ONS are banks/building societies, government, and 'other', which includes other financial intermediaries as well as non-financial companies and households. The available data indicate that bonds and equity issued by non-financial intermediaries are increasing as a proportion of UK external assets and liabilities. At end 1987, 50% of portfolio liabilities were issued by banks and building societies, 16% by central government, and 34% by all other sectors, including non-financial companies, households, and other financial institutions such as pension funds. By end 1997 the top two rankings had been reversed: banks and building societies had 27% of portfolio liabilities and other sectors had 58%.

On the other side of the balance sheet, between 1987–97, 'other' assets held by banks and building societies—mainly their lending overseas—roughly doubled, from £408 billion at end 1987 to £821 billion at end 1997 (a 100% increase). But their portfolio investment assets increased even more sharply (by 410%), from £36.7 billion to £187 billion. These figures indicate a relative decline of traditional lending on banks' balance sheets. This will partly be because of corporate restructurings in the period, in which securities trading houses have been merged with their parent banks. It could also reflect a rise in 'securitisations', in which loans are repackaged and sold to back bonds.

#### Reserve assets

Reserves were £31.8 billion at end 1995, having risen every year since 1990. By the end of 1998 Q3, they had fallen to £22.4 billion, down by £9.4 billion. However, the fall in net reserves is not so large when computed in dollar terms, because of the strength of sterling over this period (which lowers the value of foreign currency assets). Converted at market rates, UK external reserves were \$43.1 billion at end 1995, and \$33.6 billion at end September 1998—a fall of \$9.5 billion. Each component of the reserves is converted into dollars in separate currencies in these data, so a straightforward re-conversion to sterling of the difference is not possible without a full breakdown by type of asset. But a rough estimate can be made using the average of sterling/dollar market rates over the period between end 1995 and end September 1998, and this values the difference at £5.9 billion.

Direct financing of current account imbalances from the reserves is only relevant for countries with closed financial accounts (ie those that operate capital controls, assuming that there are no upward valuation effects on external assets that have similar effects to financial inflows in the accounts). This is no longer the situation in the United Kingdom. The UK current account deficit could comfortably have been funded out of reserves in any single year of the period considered. When a country continually

runs a current account deficit, one question is how long the reserves would last. From Table A, the United Kingdom's cumulative current account deficit for the period 1993–96 was £16.4 billion. Net reserves in 1993 were £29.7 billion. So 1993's reserves could hypothetically have funded the 1993–96 current account deficit and more.

### The external balance sheet and emerging markets

Geographical analysis of the external balance sheet is complicated by the fact that geographic splits of stocks of external assets and liabilities are not published. However, an analysis is available for 1997 direct investment data, (1) and for banking data (collected by the Bank of England). (2) (The ONS points out that the direct investment data for 1997 are subject to revision.) These sources throw some light on how the recent crises in emerging markets have affected the UK balance sheet. (3)

Table B presents banks' portfolio and other investments in a selection of relevant countries since the start of the crisis.

Table B
UK resident banks' lending and portfolio investments
(PI) in selected countries

| £ billions               |          |           |       |           |           |       |  |  |
|--------------------------|----------|-----------|-------|-----------|-----------|-------|--|--|
|                          | Category | 1997      |       | 1998      |           |       |  |  |
|                          |          | <u>Q3</u> | Q4    | <u>Q1</u> | <u>Q2</u> | Q3    |  |  |
| World                    | Lending  | 745.0     | 812.0 | 792.0     | 817.0     | 871.0 |  |  |
|                          | PI       | 193.0     | 195.0 | 204.0     | 222.0     | 235.0 |  |  |
| Hong Kong                | Lending  | 28.0      | 22.0  | 18.0      | 17.0      | 16.0  |  |  |
|                          | PI       | 2.0       | 0.7   | 0.9       | 0.7       | 1.1   |  |  |
| Indonesia                | Lending  | 0.6       | 0.6   | 0.5       | 0.4       | 0.5   |  |  |
|                          | PI       | 1.1       | 0.5   | 0.5       | 0.4       | 0.3   |  |  |
| Malaysia                 | Lending  | 1.0       | 1.2   | 0.8       | 1.0       | 0.6   |  |  |
| •                        | PI       | 0.5       | 0.5   | 0.6       | 0.5       | 0.6   |  |  |
| South Korea              | Lending  | 7.1       | 6.1   | 4.4       | 4.6       | 4.1   |  |  |
|                          | PI       | 2.7       | 2.2   | 2.0       | 2.0       | 2.0   |  |  |
| Russia                   | Lending  | 2.8       | 3.1   | 3.8       | 4.2       | 2.7   |  |  |
|                          | PI       | 2.5       | 2.7   | 2.8       | 3.5       | 0.7   |  |  |
| Brazil                   | Lending  | 4.0       | 3.7   | 4.0       | 4.2       | 3.3   |  |  |
|                          | PI       | 3.8       | 2.7   | 3.2       | 3.3       | 3.0   |  |  |
| South Africa             | Lending  | 4.2       | 4.0   | 3.8       | 3.4       | 3.4   |  |  |
|                          | PI       | 1.8       | 1.6   | 2.1       | 1.7       | 1.4   |  |  |
| Mexico                   | Lending  | 1.6       | 2.3   | 2.1       | 2.2       | 2.3   |  |  |
|                          | PI       | 3.5       | 3.0   | 3.4       | 2.7       | 2.0   |  |  |
| Source: Bank of England. |          |           |       |           |           |       |  |  |

Detailed analyses of UK banks' country exposures are available from Bank of England statistical returns. Banks accounted for 52% each of gross UK assets and liabilities in 1997, so their data comprise a substantial proportion of the overall balance sheet.

World totals of stocks of UK banks' investments in non-residents continued to grow in all categories, except equities. It can be noted that stocks of investment in emerging markets are a small proportion of UK banks' total investments in non-residents. UK banks' lending to all the countries listed above was only 6.6% of their total non-resident lending at end Q3 1997, and this proportion fell to 3.8% at end Q3 1998. Their portfolio investment in the listed emerging markets fell from 9.4% to 4.8% of their total portfolio investments in non-residents.

The most striking feature of the data for the emerging markets is the extent to which lending to, and equity purchases from, affected countries have fallen since the crisis began, though portfolio investment has held up more strongly. But there are exceptions, both by country and by category.

Malaysia appears to have fared relatively better than other south-east Asian countries. UK banks' lending to Malaysia did decline sharply, from £1 billion at end Q3 1997, to £0.6 billion at end Q3 1998. But investment in debt securities rose from £0.5 billion to £0.6 billion, and UK banks held £42 million of Malaysian equities at end Q3 1997 and £48 million at end Q3 1998.

Portfolio investment in Malaysia contrasts strikingly with that in Indonesia and South Korea, two very different economies, both affected by the Asian crisis. UK banks heavily reduced their portfolio investments in both countries. Apart from a slight rise in UK banks' holdings of short-term Korean bills, there were falls in all other categories for both countries. Most noticeably, stocks of investment in Korean equities sank from £83 million to £9 million. Part of the explanation for the relative strength of Malaysian debt security and equity investment compared with lending is that lending tends to be shorter term. Stocks of portfolio investment in Malaysia may have been kept artificially high by the imposition of capital controls by the government in the first week of September 1998, leaving non-residents' portfolio capital locked in the country.

As noted above, UK banks increased their holdings of portfolio and other investments, except equities, in the rest of the world between end Q3 1997 and end Q3 1998. Equity stocks declined from £6.9 billion to £4.7 billion over the period, mostly relating to investment in Hong Kong. Portfolio equity investment in Hong Kong fell from £1.4 billion to -£0.2 billion, which means that in aggregate, UK banks had a short position of £0.2 billion.

The direct investment data shed more light on how international developments are affecting the UK external balance sheet. The most striking feature of the data is again the small size of the worst-affected emerging markets in the United Kingdom's external asset levels. It is also notable that until the end of 1997 (the most recent available geographic data), the crisis seems to have had little effect on foreign direct investment data. This is plausible, given the more lasting nature of direct investment compared with portfolio and other investments. It is more difficult for investors to unwind their direct investments; it is also possible that the incentive to unwind direct investments is not very strong. An emerging market that devalues its currency becomes a cheaper place to do business in sterling or dollar terms. The comparison with Mexico, below, gives some indication of how direct investment levels in crisis-hit countries might develop over time.

<sup>(1)</sup> ONS Direct Investment First Release, December 1998.

From Bank of England surveys of Bank for International Settlements international banking statistics.
 See 'The international environment' article in the Quarterly Bulletin each quarter since February 1998 for an account of recent developments in

<sup>(3)</sup> See 'The international environment' article in the *Quarterly Bulletin* each quarter since February 1998 for an account of recent developments emerging markets.

Table C shows UK direct investments in a selection of countries since 1993. Brazil and South Africa are included, given their significance to the United Kingdom's direct investments in emerging markets. Data are currently only available to end 1997.

Table C Stocks of UK direct investments overseas

| £ billions   | 1993   | 1994   | 1995   | 1996   | 1997   |
|--|--|--|--|--|--|
| World<br>Hong Kong<br>Indonesia<br>Malaysia<br>South Korea<br>Russia<br>Brazil<br>South Africa | 165.8<br>3.6<br>0.3<br>1.8<br>0.2<br>0.0<br>2.0<br>2.6 | 177.1<br>3.4<br>0.3<br>2.1<br>0.2<br>0.0<br>2.1<br>2.2 | 196.7<br>4.0<br>0.4<br>1.8<br>0.3<br>0.1<br>2.3<br>2.8 | 194.7<br>4.6<br>0.4<br>2.2<br>0.2<br>0.2<br>2.4<br>2.4 | 224.4<br>4.4<br>0.3<br>2.3<br>0.2<br>0.4<br>2.2<br>2.5 |
| Mexico   | 0.4  | 0.3  | 0.4  | 0.6  | 1.3  |

# Stocks of direct investment in the United Kingdom from selected countries

| £ billions  | 1993                              | 1994                              | 1995                               | 1996                                | 1997                                |
|---|-----------------------------------|-----------------------------------|------------------------------------|-------------------------------------|-------------------------------------|
| World<br>Hong Kong<br>South Korea<br>Russia<br>South Africa | 121.0<br>0.3<br>0.0<br>0.0<br>0.6 | 121.3<br>0.2<br>0.0<br>0.0<br>0.5 | 128.9<br>0.0<br>0.0<br>-0.1<br>0.7 | 134.7<br>0.0<br>-0.2<br>-0.2<br>0.6 | 157.0<br>0.0<br>-0.3<br>-0.2<br>0.7 |
| Source: ONS.  |                                   |                                   |                                    |                                     |                                     |

The stock of direct investment in 'other Asian countries' (all Asia except the Near and Middle East and Australasia—ie including the crisis countries and Japan) was £18.4 billion at end 1997. This accounted for only 8.2% of total outward UK direct investment. Investment in Russia, £0.4 billion at end 1997, was a negligible 0.2% of the UK total. Furthermore, the United Kingdom's overall rate of return on its direct investments has remained strong over the period (see Table D on page 46).

The stock of inward investment in the United Kingdom from the 'other Asian countries', at £7.3 billion, was 4.7% of total investment from abroad. Excluding Japan, the rest of 'other Asian countries'—including South Korea—accounted for only £0.8 billion of investment into the United Kingdom, 0.5% of the total from abroad. Russia's direct investments in the United Kingdom were £0.2 billion at end 1997, or 0.1% of inward direct investment.

There does appear to have been a small retrenchment in UK outward direct investment to affected countries, but the pattern is not uniform. Total investment in 'other Asian countries' fell from £19.2 billion to £18.4 billion, but this includes a decline of investment in Japan of £0.8 billion. Investment in Indonesia fell by £0.1 billion, while investment in Malaysia increased by £0.1 billion.

Inward investment from 'other Asian countries', at £7.3 billion, was up on the end-1996 total of £6.8 billion. Japan had investments of £6.5 billion at end 1997, up from £5.9 billion at end 1996, thereby accounting for most of both the total and the year-on-year increase.

The Mexican figures give a useful comparison that draws attention to the rapid recovery of direct investment when the financial crisis was over. The Mexican government's official devaluation of the peso occurred in December 1994; the currency continued to slide in early 1995. A US-led \$11.2 billion (£7.3 billion) aid package was announced in February 1995. The end-year level of UK direct investment in Mexico was lower in 1994 and 1995 than the end-year 1993 figure of £0.4 billion, but it rose to £0.6 billion by end 1996 and more than doubled by end 1997, to £1.3 billion. (The figures for direct investment in the United Kingdom from Mexico are not large enough to be recorded separately in the published statistics.)

It appears to have taken less than two years for confidence in Mexico to be restored among investors. In addition to the \$11.2 billion aid package, the Mexican government announced an IMF-approved economic reform programme (to curb inflation and the trade deficit). Mexico's links to the strongly growing United States through the North American Free-Trade Agreement could also have contributed to the return of investor confidence.

# Investment income and the UK external balance sheet

This section considers UK investment income in relation to the external balance sheet.

Comparing investment income credits and debits with gross assets and liabilities allows implied 'rates of return' to be calculated. These express the proportion of income to stocks of investment; the stock of investments is expressed at market valuations, and thus includes revaluations. Chart 3 gives 'rates of return' on each category of investment for assets and liabilities since 1987 on this basis.

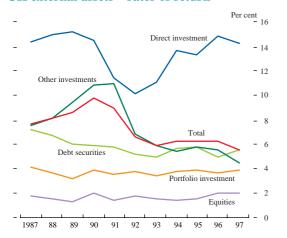
In broad terms, the rate of return both on assets and liabilities dropped significantly in 1992, and subsequently fell further, largely because of falling rates of return on other investment assets and liabilities, in line with falls in interest rates in major economies since the early 1990s.

Sectoral analyses are provided by the ONS for direct investment and portfolio investment assets items, allowing rates of return to be calculated sector by sector; these are shown in Table D.

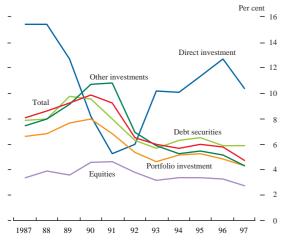
Monetary financial institutions (MFIs), ie banks and building societies, clearly have the most profitable direct investments overseas in 1997, even given that the rates of return on direct investment are probably overstated, because of the downward bias to valuations of direct investment (normally book rather than market value). There is no reason to suppose that MFIs are relatively more prone than other sectors to undervalue their direct investments. However, the MFIs' figures are more volatile and have made large negative contributions to direct investment income in the past.

Other financial institutions (OFIs), such as securities dealers and pension funds, are the next most profitable sector and the only other one enjoying a rate of return above that of the United Kingdom as a whole in 1997. This is unsurprising, as many OFIs (such as securities dealers) have similar businesses to the investment banking operations of MFIs. OFIs' rates of return are also volatile.

Chart 3
UK external assets—rates of return



## UK external liabilities—rates of return



Private non-financial corporations (PNFCs) have a rate of return slightly below average, and insurance companies appear to be slightly lower again. However, both are much less volatile than MFIs or OFIs and steadily make positive contributions.

A different picture emerges from the sectoral breakdown of rates of return on portfolio investment. MFIs are the only sector to have consistently outperformed the average rate of return on portfolio investment assets. PNFCs come close, having outperformed the average in every year except 1987 and 1994. Households (including non-profit institutions serving households) come next, followed by OFIs and insurance companies.

The United Kingdom's liabilities generally earned a higher rate of return for their owners than UK residents earned on their assets until 1990. The difference narrowed between 1990–94, with assets earning more than liabilities in 1990 and 1992. After 1994, assets started to earn more than liabilities by a clear margin. So there is a reversal in the period, from non-residents earning 0.3% more on investments in the United Kingdom than British residents earned from abroad, to British residents earning 0.8% more than non-residents earned from the United Kingdom. This development must be seen in the context of falling rates of return on both assets and liabilities, consistent with falls in interest rates in both the United Kingdom and other major economies.

The greatest divergence between rates of return on assets and liabilities is in direct investment. The rate of return on the United Kingdom's assets declined from 14.4% to 14.3% over the period, which may be characterised as flat overall, with a significant dip to 11.5% in 1991 and 10.2% in 1992. The rate of return earned by non-residents on direct investment in the United Kingdom fell from 15.5% in

Table D
Sectoral rates of return on UK direct investment assets

| Per cent  | <u>1987</u>                                 | 1988                                       | 1989                                       | 1990                                      | <u>1991</u>                                 | <u>1992</u>                                | 1993                                      | 1994  | 1995                                       | <u>1996</u>                                 | <u>1997</u>                                |
|---|---|--|--|---|---|--|---|---|--|---|--|
| Monetary financial institutions<br>Insurance companies<br>Other financial institutions<br>Private non-financial corporations<br><b>Total</b>            | -1.4<br>9.6<br>119.0<br>15.8<br><b>14.4</b> | 13.7<br>7.9<br>6.4<br>15.8<br><b>15.0</b>  | 2.5<br>4.1<br>86.0<br>16.4<br><b>15.1</b>  | -5.5<br>2.9<br>2.8<br>15.8<br><b>14.5</b> | -18.2<br>3.2<br>52.6<br>12.3<br><b>11.5</b> | 13.8<br>5.1<br>36.2<br>10.5<br><b>10.2</b> | 2.5<br>8.0<br>19.1<br>11.4<br><b>11.2</b> | 14.2<br>5.4<br>20.7<br>14.1<br><b>13.7</b>  | 4.6<br>10.5<br>22.5<br>13.6<br><b>13.4</b> | 29.8<br>8.2<br>23.9<br>14.6<br><b>14.9</b>  | 44.6<br>9.6<br>19.2<br>14.2<br><b>14.5</b> |
| Sectoral rates of return on direct investment in the United Kingdom   |   |  |  |   |   |  |   |   |  |   |  |
| Per cent  | <u>1987</u>                                 | 1988                                       | 1989                                       | 1990                                      | 1991  | 1992                                       | 1993                                      | 1994  | 1995                                       | 1996  | <u>1997</u>                                |
| Monetary financial institutions<br>Insurance companies<br>Other financial institutions<br>Private non-financial corporations<br>Total                   | 1.2<br>4.5<br>-0.9<br>18.4<br><b>15.5</b>   | 13.3<br>6.4<br>-2.5<br>17.0<br><b>15.5</b> | -1.4<br>3.1<br>15.0<br>14.1<br><b>12.7</b> | -8.0<br>-3.2<br>5.4<br>10.4<br><b>8.2</b> | -12.4<br>-5.5<br>15.4<br>7.0<br><b>5.3</b>  | 0.9<br>-0.1<br>10.3<br>6.5<br><b>5.9</b>   | 27.2<br>7.6<br>19.2<br>7.3<br><b>10.1</b> | 12.4<br>21.4<br>-6.0<br>10.5<br><b>10.0</b> | 16.3<br>16.3<br>5.8<br>11.0<br><b>11.3</b> | 15.4<br>10.8<br>11.4<br>12.5<br><b>12.7</b> | 8.5<br>6.3<br>6.9<br>11.6<br><b>10.4</b>   |
| Sectoral rates of return on UK portfolio investment assets  |   |  |  |   |   |  |   |   |  |   |  |
| Per cent  | 1987  | 1988                                       | 1989                                       | 1990                                      | 1991  | 1992                                       | 1993                                      | 1994  | 1995                                       | 1996  | 1997                                       |
| Monetary financial institutions<br>Insurance companies and pension funds<br>Other financial institutions<br>Private non-financial corporations<br>Total | 7.9<br>3.1<br>2.7<br>4.5<br><b>4.6</b>      | 7.6<br>2.7<br>2.0<br>4.8<br><b>4.0</b>     | 7.1<br>2.3<br>1.9<br>4.9<br><b>3.5</b>     | 7.7<br>2.9<br>3.2<br>6.9<br><b>4.4</b>    | 7.0<br>2.6<br>2.8<br>8.6<br><b>3.9</b>      | 7.1<br>2.3<br>4.3<br>6.9<br><b>4.4</b>     | 5.5<br>2.2<br>4.4<br>5.4<br>3.7           | 7.5<br>2.2<br>4.3<br>4.2<br><b>4.5</b>      | 7.3<br>2.3<br>5.8<br>6.7<br><b>4.4</b>     | 7.2<br>2.1<br>5.3<br>2.7<br><b>3.9</b>      | 7.7<br>2.3<br>8.0<br>2.4<br><b>4.4</b>     |

1987 to 10.4% in 1997 (with a dip in 1991–92 down to the 5%–6% range). Earnings on direct investment in the United Kingdom should be lower in 1998, because of the large losses reported by foreign-owned banks in the third quarter of the year.

Splitting direct investment rates of return by sector, MFIs' rates of return increased strongly in the last two years of the period, up to 44.6%. Although this figure may be distorted by asset undervaluation (see above), the rate on assets is still well above the return earned by non-residents on UK liabilities. The return earned by the United Kingdom's investments in PNFCs abroad declined only marginally, from

15.8% in 1987 to 14.2% in 1997. The return earned by non-residents on their assets in British PNFCs fell from 18.4% to 11.6%.

The divergence between rates of return on portfolio assets narrowed over the period from -2.4% (assets-liabilities) to -0.3%, further contributing to the reversal. The ONS *Pink Book* contains a full split of portfolio investment assets but not liabilities. However, it can be seen that the rate of return on assets held by UK-resident MFIs, the second-largest sector of British asset-holders, declined only from 7.9% to 7.7%, while non-residents' earnings on portfolio holdings in British MFIs fell from 6.9% to 5.2%.