

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

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*The external balance sheet (or international investment position) gives the most complete picture of the stock position of a country in its financial transactions with the rest of the world. The very breadth of coverage of the data leads inevitably to problems of measurement and valuation. Nevertheless, subject to certain qualifications, the data can throw some light on macroeconomic and financial stability issues related to the United Kingdom's cross-border financial links. This article, one in an annual series, discusses the recent evolution of the United Kingdom's external balance sheet, reviewing along the way some of the main methodological issues that impinge on an interpretation of the data. It concludes that, despite a persistent current account deficit, the balance of probability is that the United Kingdom still has net external assets, or at least the capacity to generate net investment income from overseas. There are also some grounds for optimism that the structure of its assets and liabilities has left the United Kingdom in a fairly strong position to withstand financial shocks.*

## The external balance sheet: methodological issues

In this article the term 'external balance sheet' is used to refer to that part of the balance of payments accounts known as the international investment position (IIP).<sup>(1)</sup> Like the other balance of payments data, the IIP is compiled on the basis of residence. It represents the stock of financial assets and liabilities of UK-resident entities *vis-à-vis* counterparties in the rest of the world.<sup>(2)</sup> These include direct investment, cross-border holdings of equities, bonds and money market instruments, and cross-border assets and liabilities of banks. The data do not at present include stock figures for financial derivative instruments, although limited data on transactions in financial derivatives are now included in the financial account of the balance of payments.<sup>(3)</sup>

Figure 1 shows the place of the IIP in the integrated balance of payments accounts and its

definitional relationship to the balance of payments flow measures.

Reading horizontally, the change in the net asset/liability position between two points in time must by definition be equal to the net flow of assets and liabilities recorded in the financial account,<sup>(4)</sup> plus or minus net changes in the valuation of the initial stocks, recorded in the revaluations account.<sup>(5)</sup> Reading vertically, the sum of the current account and capital account balances must by definition be equal to the financial account balance. In practice, an errors and omissions term will be necessary to ensure that this is so. Nevertheless, a current account deficit must imply a net inflow in the financial account.

Another way to approach the IIP is through its relationship with national accounts concepts. The net worth of an economy, recorded in the National Balance Sheet,<sup>(6)</sup> can be considered as comprising its stock of

(1) An attempt to estimate the UK national balance sheet has been made in previous articles in this series, see 'The external balance sheet of the United Kingdom: implications for financial stability?', Senior, S and Westwood, R, *Bank of England Quarterly Bulletin*, November 2000 (page 353) and Winter 2001 (page 404).

(2) Data on the international investment position are published annually in United Kingdom Balance of Payments, *The Pink Book 2002*, published by the Office for National Statistics, Chapter 8.

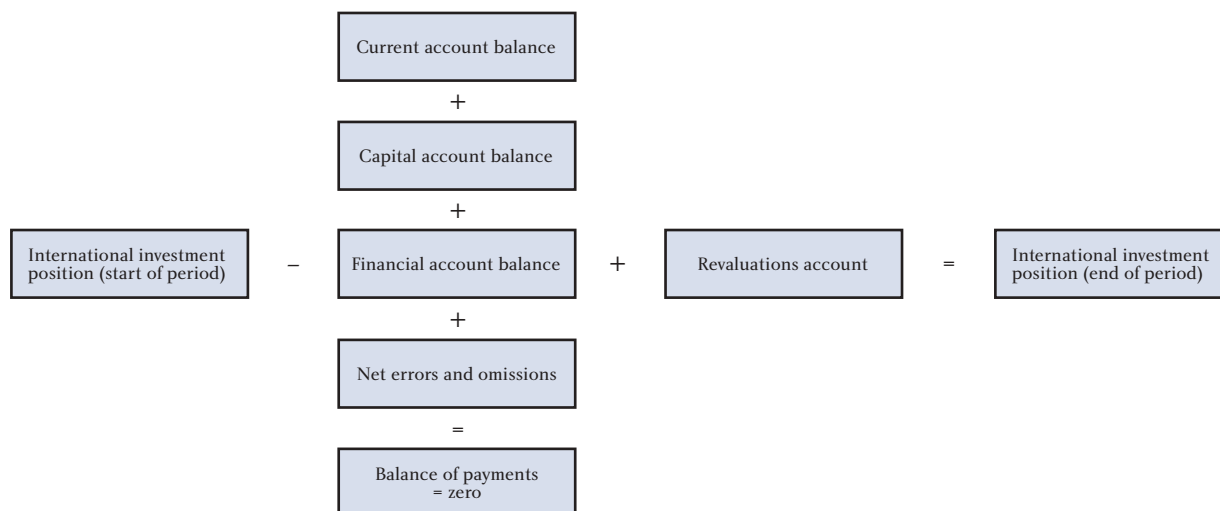
(3) Some balance sheet data on financial derivatives assets and liabilities of banks and securities dealers (described as 'developmental') are reported by the ONS. See Table FD in *The Pink Book 2002*, page 117.

(4) The financial account balance equals net investment in the United Kingdom less net UK investment abroad.

(5) The United Kingdom does not at present produce a revaluations account. The Bank of England and ONS are currently working on a project to assess whether sufficiently detailed data are available to compile a revaluations account of acceptable quality.

(6) Data on the National Balance Sheet are published annually in United Kingdom National Accounts, *The Blue Book 2002*, Chapter 10.

Figure 1



non-financial assets (made up of tangible assets, such as buildings and plant and machinery, and intangible assets) plus its net financial assets or liabilities. When aggregating over the economy as a whole, financial liabilities and assets *vis-à-vis* other domestic residents will net out (one entity's asset being another's liability), so that net financial assets must be equivalent to the IIP.<sup>(1)</sup>

It is not surprising, given the comprehensive coverage of the external balance sheet, that significant problems of measurement should arise. The Office for National Statistics (ONS) and the Bank of England compile the IIP data from a number of institutional surveys and censuses. The quality of the information varies considerably. At one end of the spectrum, reliable data from the banking sector come from a well-established regular reporting structure covering all banks. At the other, data on portfolio debt liabilities are calculated as a residual item, using annual survey data. New information is incorporated as it becomes available from each individual source, so that the aggregate figures are subject to frequent revision, sometimes affecting data covering a long period. Naturally, as the difference between two very large numbers, the net IIP is subject to proportionately large revisions.

Over the years, there have been a number of initiatives at the national and international level aimed at improving the quality of balance of payments data. A recent project under the auspices of the European Central Bank has been considering ways of improving the reporting of portfolio investment data. The Bank of

England has been actively involved in this work (the significance of which is outlined below), described in more detail in the box on pages 442–43.

A further measurement issue arises in relation to valuation. In principle, under the internationally accepted balance of payments methodology,<sup>(2)</sup> assets and liabilities should be measured at market prices. But in practice, market valuations are not available for important components of the balance sheet so sometimes book values are reported instead. For the banking sector, securities held in trading and banking books are measured at market value; loans are adjusted regularly for write-offs. The biggest issue arises in the case of direct investment (which for the United Kingdom accounts for about 10% of liabilities and 20% of assets), where current market values are likely to diverge considerably from the book values at which assets and liabilities are recorded. Clearly, this issue affects revaluation as well. While all foreign currency assets and liabilities will be reported at market exchange rates (and so be subject to valuation change due to currency movements) the exchange rate translation will be applied in some cases to market values and in others to book values. So an element of judgment is required in interpreting both the levels of the aggregated data and movements in these levels through time.

### Trends in the UK external balance sheet

Chart 1 and Table A show developments in the external balance sheet in a long-term context. Over the past 30 years, gross external assets and liabilities have grown at an average annual (compound) rate of about 16%.

(1) See *Balance of Payments Manual—5th edition (BPM5)* published by the IMF, Chapter 3, paragraph 55.

(2) BPM5, see footnote 1 on this page.

## International efforts to improve portfolio investment data

The external balance sheet is a record of stock positions at a particular point in time. Another way of approaching it is to view it as the accumulation of portfolio, direct and other investment flows and reserve asset flows up to the same point. These are the financial account flows in the balance of payments. The accurate estimation of these flows is key to the monitoring of external balance sheet positions at higher than annual frequencies—exhaustive stock positions are only estimated on an annual basis.

Of the financial account flows mentioned above, portfolio investment<sup>(1)</sup> is probably the most difficult to measure. The challenges involved in accurately quantifying these flows have been internationally recognised for some time.<sup>(2)</sup> In 2001 the European Central Bank's (ECB) Working Group on Balance of Payments and External Reserves (WG-BP&ER) established the Task Force on Portfolio Investment Collection Systems (TF-PICS) to investigate the need for, and the characteristics of, harmonised systems for the collection of portfolio investment data. The

primary aim was to improve the quality of euro-area data. When dealing with a supranational aggregate, an element of harmonisation was seen as an important step towards that aim. The Final Report has now been published and is available on the ECB web site at the following link [www.ecb.int/pub/pdf/portfolioinvestmenttaskforce200206.pdf](http://www.ecb.int/pub/pdf/portfolioinvestmenttaskforce200206.pdf). The Bank of England was represented on the Task Force.

The Task Force identified a group of what it considered to be key issues relating to the statistical reporting of portfolio investment. This included amongst others: aggregate versus security-by-security (s-b-s) reporting,<sup>(3)</sup> sampling and grossing-up techniques in the context of s-b-s reporting, multinational companies and distinguishing between direct and portfolio investment.

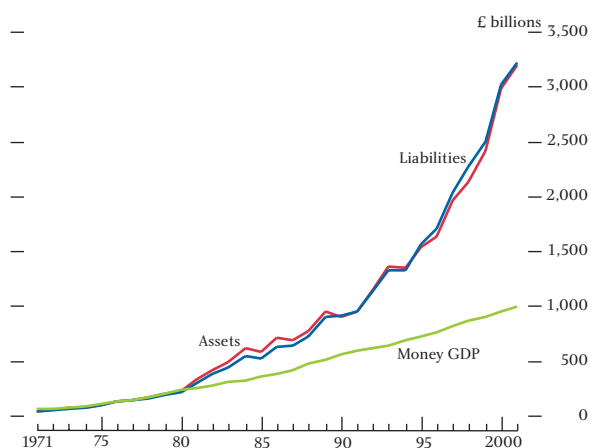
It then went on to consider the three channels through which data on portfolio investment transactions and positions can be obtained:

- (1) Portfolio investment is investment in equity and debt securities issued by non-resident companies or governments. A portfolio investment—unlike a direct investment, which is defined as reflecting 'the objective of a resident entity in one economy (to obtain) a lasting interest in an enterprise resident in another economy' (paragraph 359, BPM5)—is not interpreted as giving the investor any significant influence over the operations of the company or institution.
- (2) See 'Report on the measurement of international capital flows', *The Godeaux Report*, 15 June 1992, ISBN 1-55775-307-5, [www.imf.org/external/pubs/cat/longres.cfm?sk=108.0](http://www.imf.org/external/pubs/cat/longres.cfm?sk=108.0)
- (3) In a s-b-s collection system, agents report their issues or holdings of individual securities. It is used mainly in connection with indirect reporting but can be used with direct reporting (the United Kingdom presently has an aggregate direct reporting system). In a direct reporting system end-investors report, in an indirect system an intermediary reports on the end-investors' behalf.

This reflects the general globalisation of economic activity and capital markets, reinforced by the success of the United Kingdom as an international financial centre, particularly for cross-border banking.

Chart 2 shows the growth rates in the main components of the external balance sheet over the period 1991–2001. On the assets side the strongest growth was in direct investment, which rose at an average annual rate of almost 18%. Growth in the other components was more subdued, but in all cases the growth rate has on average exceeded that of GDP. On the liabilities side the strongest growth was in portfolio equity, which rose at an average annual rate of almost 23%.

**Chart 1**  
UK gross external assets and liabilities



Source: ONS.

- Indirect settlement-based reporting by domestic banks for their own transactions and transactions executed on behalf of their clients.
- Direct reporting by domestic issuers/end-investors.
- Indirect reporting by custodians or other intermediaries.

The work was drawn together to produce a set of recommendations and conclusions. Their primary purpose was to provide countries with advice on how to maintain their current data collection systems and/or which issues to consider when thinking about moving to a different system. The TF-PICS took the view that none of the three channels set out above would be suitable for all types of reporting agent. Extending this line of reasoning suggested that the most suitable collection system for any individual country may combine features of both direct and indirect reporting, applying these to different institutional sectors as appropriate. The TF-PICS developed a 'cascade' of combinations of input dimensions which it divided into acceptable (and better) and unacceptable approaches—reproduced in Table 1. For example, combination (7) represents the features of a data collection system that reporters of any institutional (sub) sector should in theory be able to meet (ie a minimum benchmark). Therefore—as long as method (7) or better is used—it would be for the compiler in each individual country to decide how each reporter/institutional sector would be required to report.

**Table 1**  
Features of data collection models: ranking of combinations of input dimensions

(1)	Monthly flows [security-by-security] + monthly stocks [security-by-security]	Ideal
(2a)	Monthly flows [security-by-security] + quarterly stocks [security-by-security]	Good
(2b)	Monthly flows [security-by-security] + annual stocks [security-by-security]	
(3)	Quarterly stocks [security-by-security] + monthly flows [aggregate]	Acceptable
(4)	Monthly stocks [aggregate] + monthly flows [aggregate]	
(5)	Monthly stocks [security-by-security] + <b>derived</b> monthly flows [security-by-security]	Unacceptable
(6)	Annual stocks [security-by-security] + monthly flows [aggregate]	
(7)	Quarterly stocks [aggregate] + monthly flows [aggregate]	
(8)	<b>Derived</b> annual stocks [security-by-security] + monthly flows [security-by-security]	
(9)	Quarterly stocks [security-by-security] + <b>derived</b> quarterly flows [security-by-security] + estimated monthly flows [aggregate]	
(10)	Annual stocks [security-by-security] + quarterly flows [aggregate] + estimated monthly flows [aggregate]	
(11)	Quarterly stocks [aggregate] + quarterly flows [aggregate] + estimated monthly flows [aggregate]	
(12)	<b>Derived</b> annual stocks [aggregate] + monthly flows [aggregate]	

Notes: 'Derived stocks' = accumulation of flows.

'Derived flows' = difference between stocks (adjusted for exchange rate and price changes).

'Estimated flows' = monthly split estimated from quarterly flows.

Part of the agreed follow-up to the TF-PICS report was that European Monetary Union (EMU) participants and a small group of other countries, including the United Kingdom, would conduct national feasibility studies to assess the costs of adopting s-b-s collection. In the United Kingdom a small group of global custodians has submitted data on a s-b-s basis to the Bank of England. The Bank is currently assessing the mechanics of compiling and analysing these data to be able to produce the required feasibility study results.

**Table A**  
UK external balance sheet

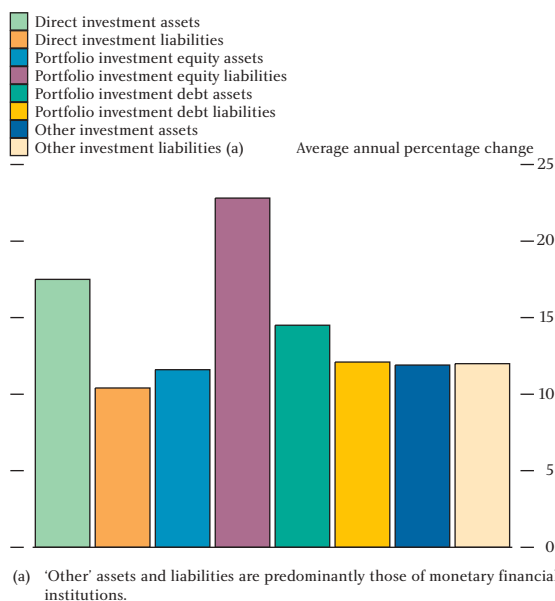
£ billions

	1971		1981		1991		2001		2002 H1	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Direct investment	9	6	45	30	128	129	645	347	672	351
Portfolio investment										
Debt	n.a.	n.a.	10	44	153	158	514	432	525	452
Equity	n.a.	n.a.	18	4	128	70	385	547	384	511
Other investment	n.a.	n.a.	n.a.	n.a.	528	608	1,620	1,889	1,628	1,920
Reserve assets	3		12		26		26		26	
<b>Total</b>	<b>40</b>	<b>37</b>	<b>326</b>	<b>299</b>	<b>943</b>	<b>946</b>	<b>3,190</b>	<b>3,215</b>	<b>3,234</b>	<b>3,234</b>
<i>Memorandum items:</i>										
Current account	1.1		4.8		-10.7		-21.1		-8.2	
Capital account	-0.0		-0.1		0.5		1.2		-0.0	
Financial account	-1.3		-5.3		5.3		14.4		4.8	
Errors and omissions	0.2		0.5		5.1		5.5		3.4	

n.a. = not available.

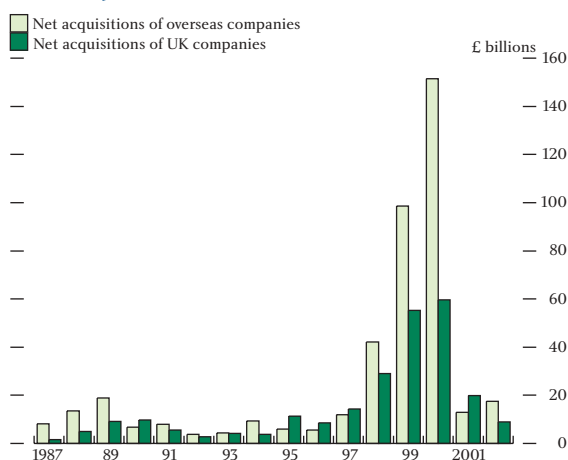
Columns may not sum to totals because of rounding.

**Chart 2**  
**Growth of assets and liabilities by component, 1991–2001**



The key episode driving growth in the external balance sheet in the latter part of this period was the wave of cross-border mergers and acquisitions beginning in 1998 and peaking in 2000, as shown in Chart 3. This had a strong impact on several categories of asset and liability. Overseas acquisitions by UK firms, often using their own shares, simultaneously boosted direct investment assets and portfolio equity liabilities. Foreign acquisitions of UK firms, although on a smaller scale, also boosted direct investment liabilities and portfolio equity assets.

**Chart 3**  
**International mergers and acquisitions involving UK companies**



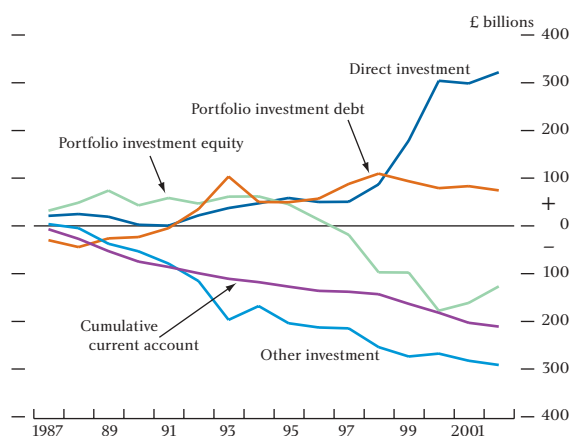
Note: 2002 data cover Q1–Q3 only.

The ability to raise funds quickly and on a large scale meant that international syndicated bank lending also

played an important role in the worldwide mergers boom, at least at the immediate point of the acquisition. Opportunities for financing acquisitions were a major factor behind the acceleration of UK banks' external assets and liabilities, the growth of which peaked at rates of about 30% and 25% respectively in the year to 2001 Q1. A number of acquisitions were soon refinanced in bond markets, which is reflected in the growth in UK portfolio debt liabilities of over 25% in the same period.

The impact of this activity on net assets is shown in Chart 4. For most of the first half of the 1990s the United Kingdom had both portfolio and direct investment net assets, with a steadily growing net liability position in other investment. From 1997 there was a sharp divergence among the components representing assets and liabilities of the non-bank corporate sector. Because UK acquisitions of overseas companies were much larger than net overseas acquisitions of UK companies (see Chart 3) net portfolio equity assets swung into net liabilities, while net direct investment assets rose very sharply. This has had important implications for the subsequent evolution of recorded net assets during the bear market in equities.

**Chart 4**  
**UK net external assets by instrument type**



Much of the growth in banking sector assets and liabilities has reflected the intermediation through UK banks of transactions between non-residents. Nevertheless, over time there has been a trend increase in the net external liabilities of the banking sector (included in the category of 'other' assets and liabilities), which form by far the largest component of total net liabilities. With the exception of the level shift in late 1992/early 1993—which was probably due to the combined impact of sterling's depreciation following the exit from the Exchange Rate Mechanism and the

corresponding adjustment of assets/liabilities—the banking sector's net external liabilities have tracked the cumulative current account. This suggests that UK residents without access to capital markets have been indirectly borrowing from abroad, through the domestic banking sector, to fund their net external expenditure.

## Developments in 2001 and 2002 H1

In 2001, external assets and liabilities rose in value by 7.0% and 6.5% respectively, the slowest growth rate for five years in the case of assets and seven years in the case of liabilities. The slower growth was partly the result of valuation changes (see below), which reduced the value of gross assets and liabilities by £81 billion and £99 billion respectively—but the flows of international investment were also lower than in 2000.

The impact of the slower pace of international merger and acquisition activity can be seen in the fall in direct investment flows (especially outward direct investment) from the record levels of 2000. Reduced demand for acquisition finance may also have tended to depress activity in the banking sector—but in fact, although the volumes of international banking flows fell back from the previous year, 2001 was the second-strongest year on record.

Inward and outward portfolio investment flows showed opposite trends. Inward portfolio investment fell sharply in 2001 (to £42.6 billion, from £166.4 billion in 2000), especially equity portfolio investment, which fell to only £18.1 billion from £113.6 billion in 2000. This almost certainly reflected the weaker level of outward direct investment—firms were making fewer foreign acquisitions in exchange for their own shares and bonds. In contrast, outward portfolio investment rose to a record £93.4 billion, almost equally split between equity and debt securities, giving a net portfolio outflow of -£50.8 billion compared with a net inflow of £99.1 billion in 2000.

There was a net inflow of direct investment of £20 billion in 2001, after ten consecutive years of net outflow. Net outward acquisitions of equity capital slumped to £6.3 billion, from £100.3 billion in 2000 while other capital transactions resulted in an inflow of £40.5 billion. The net other investment inflow (a feature in eight of the past ten years) rose to £33.6 billion, from £6.7 billion in 2000. Overall, there was a total recorded net inflow on the financial account of £14.4 billion, similar to the £14.0 billion in 2000.

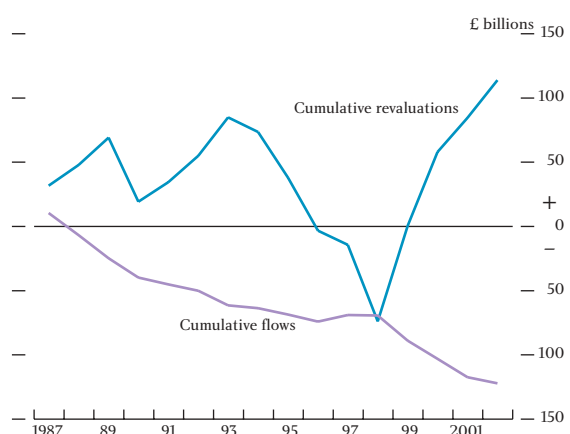
The fall in global equity markets over the year resulted in substantial valuation falls in portfolio equity gross assets and liabilities, with the overall effect of reducing net liabilities. Currency movements worked in the same direction. The overall effect of valuation changes was to reduce total net liabilities by about £18 billion. These valuation changes are discussed in a longer-term context below.

In total, UK net liabilities fell to £24.8 billion at end-2001, equivalent to 2.5% of GDP, compared with £37.0 billion, 3.9% of GDP at end-2000. In the first half of 2002, there were net financial inflows of £4.8 billion. Other investment inflows were particularly strong, and other investment net liabilities rose by a further £24 billion, to £293 billion. Nevertheless, total UK net liabilities shrank to close to zero, as further falls in equity prices eroded net portfolio liabilities to their lowest level since 1999 Q4.

## The impact of valuation changes

As noted above, data availability in the United Kingdom does not at present enable valuation changes to be measured independently. What is referred to as a valuation change in this article is the calculated difference between the stock of net assets between two periods, minus the net acquisition of assets recorded in the financial account of the balance of payments. Of course, part or all of the difference could be accounted for by errors and omissions in the measurement of the flow of assets in the financial account. Leaving this consideration aside for the moment, Chart 5 shows the cumulative impact on net external assets of financial flows and valuation changes for the period since 1987. Whereas in the period from 1993 to 1998 the impact of valuation changes was strongly to reduce net assets, the

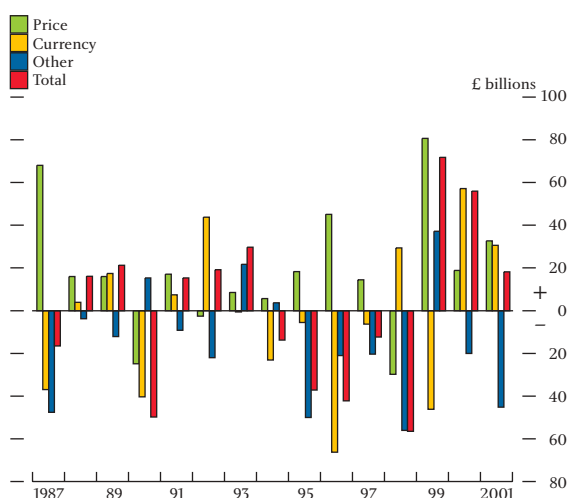
**Chart 5**  
Effect on net external assets of net financial flows and revaluations



cumulative impact since then has been to increase them, or rather to reduce net liabilities, by almost £190 billion. This has substantially reduced total net liabilities, despite a financial account inflow of £53 billion over the same period.

The change in valuation of assets and liabilities can in principle be broken down into two parts; a change in value of the asset or liability in the currency of denomination, and a change in valuation due to the translation of foreign currency assets and liabilities into sterling at prevailing exchange rates. As in past articles in this series, valuation changes have been split *ex post* into these two components, the 'price' and 'currency' effect. This uses the most recent data for each type of instrument to identify the country location of portfolio and direct investment and the currency composition of banks' assets and liabilities. Representative stock market indices are used to proxy the movements in domestic currency terms of equity assets and liabilities. The results are shown in Chart 6.

**Chart 6**  
**Decomposition of revaluations of net external assets**



The currency effect is negatively correlated with the sterling exchange rate. Whereas the United Kingdom's external assets are largely denominated in foreign currencies its liabilities are mainly denominated in sterling. So when sterling weakens, the sterling value of net assets rises and when it strengthens the value of net assets falls. This is seen, for example, in the large positive currency valuation effect in 1992 after sterling left the ERM. In fact, over the 15-year period for which estimates have been constructed, the cumulative impact of currency movements on net assets is remarkably small,

reducing net assets by the equivalent of about 1% of gross assets at end-2001.

The estimated price effect has on average been smaller from year to year than the currency effect, but over the same 15-year period as a whole, it has increased net assets by the equivalent of almost 9% of 2001 gross assets. A substantial proportion of this increase has occurred over the past two years as global equity prices have fallen. However, as noted above, there is an asymmetry between the treatment of portfolio investment (recorded at market prices) and that of direct investment assets (recorded at book value). This raises issues both about the value of net assets at any instant in time and about whether valuation changes derived from marking to market only portfolio assets are an appropriate guide to changes in the value of assets and liabilities in total.

That part of the valuation change that we cannot explain is not random but tends, in a majority of years, to reduce net assets. This may be the result of a systematic error in the model—but it is interesting that there is a similar bias in the errors and omissions term in the balance of payments flow accounts. That is, recorded net inflows in the capital and financial accounts tend to be less than recorded deficits in the current account. A possibility that would account for both this and the error in our valuation estimate is that there is underrecording of the flow of liabilities. Portfolio investment is a likely area in which this may occur. The box on pages 442–43 describes efforts that are under way to try to improve reporting in this area.

### Valuing direct investment

Previous articles in this series have discussed alternative approaches to deriving proxy values for direct investment.<sup>(1)</sup> The box on page 447 describes one approach, which assumes that direct investment values move in line with representative equity prices in each country. Chart A shows the results of applying this methodology over the period 1990 to 2002 Q2. The revalued series shows net direct investment assets peaking at about £860 billion in 2000, falling to just under £600 billion in June 2002. There was a particularly sharp fall in the estimated value of US assets in the first half of this year, reflecting a 14% fall in the Standard & Poor's index, combined with a 6% depreciation in the dollar against sterling. Nevertheless,

(1) See 'The external balance sheet of the United Kingdom: implications for financial stability?', Senior, S and Westwood, R, *Bank of England Quarterly Bulletin*, November 2000 (page 351) and Winter 2001 (page 390).

## Estimating market values for foreign direct investment (FDI)

Conceptual guidelines for the valuation of FDI are provided by BPM5 and the OECD Benchmark Definitions (third edition). BPM5, paragraph 377 ‘affirms the principle of using market price as the basis for valuation, (but) it is recognised that, in practice, book values from the balance sheets of direct investment enterprises (or investors) often are used to determine the value of the stock of direct investment.’

The ONS states<sup>(1)</sup> that ‘(the UK) FDI international investment position figures are at book values’. As most asset prices tend to increase over time, the market value of the stock of FDI is therefore likely to be significantly different from the book value once any significant amount of time has elapsed since the original reporting of the data.

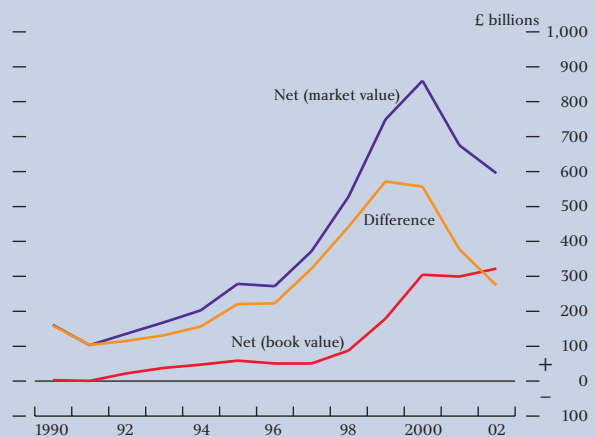
The United Kingdom had net FDI assets in every year but one—1991—since the series was established in 1966. However, it is over the past ten years—and particularly in the period since 1997—that the net asset position, even on the official data, has widened sharply. It was a little above £300 billion at the end of 2002 Q2.

Over the past ten years global equity prices have generally trended upwards—notwithstanding the sharp declines since 2000 H1. The 2000 and 2001 articles in this series contained estimates of FDI based on an update of a study by Pratten.<sup>(2)</sup> In the study Pratten established ratios for market values of outward and inward direct investment to book value at end-1991. Time series can be generated backwards and forwards from 1991 using changes in domestic/international equity markets

and exchange rates as a proxy for movements in the values of the FDI.

Chart A sets out the results of extending Pratten’s study to include data to 2002 Q2. After rising to £570 billion at end-1999, the difference between the estimated market value and book value of the United Kingdom’s net external FDI assets had fallen back to around £270 billion at the end of 2002 Q2. This decline is explained to a limited extent by the small outperformance of the UK equity market compared with its US and continental European counterparts over this two and a half year period.<sup>(3)</sup> Currency movements have had a small impact in the opposite direction. However, the key factor in the narrowing of the net position was that external FDI assets were much larger than liabilities—irrespective of the starting point for valuation—during this period. Consequently, the general and pronounced weakness in equity markets implied larger absolute falls in estimated asset values than estimated liabilities on this measurement basis.

**Chart A**  
UK direct investment: book value and market value estimates



(1) Office for National Statistics, MA4 Foreign Direct Investment, Appendix A.

(2) The valuation of outward and inward direct investment: a report for the CSO, Pratten, C, Department of Applied Economics, University of Cambridge, 1994. The CSO was the predecessor to the ONS.

(3) UK equities outperformed Japanese equities by a greater margin between end-1999 and 2002 Q2, but because of the relatively small amount of inward/outward investment with Japan this had only a marginal impact on the market value calculation.

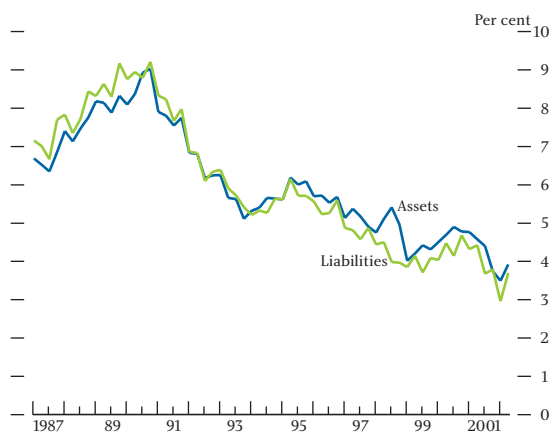
the estimated net direct investment asset value for June was still £270 billion higher than the book value estimate in the ONS data—and (given that recorded total assets and liabilities were exactly equal) would imply that the United Kingdom had total net external assets of this amount.

Some support for the proposition that, if accurate measurement were possible, this would show the United Kingdom has net external assets is provided by the investment income data in the current account. On an annual moving average basis net investment income has shown a continuous surplus since 1994 Q1. In the first



half of 2002 the surplus was £6.0 billion, up from £4.1 billion in the same period of 2001. The surplus on direct investment income was £11.4 billion, compared with £8.4 billion in 2001 H1. Since 1994 Q1 the ratio of total recorded income on assets to the total value of assets (which might be described as the yield on investment) has consistently exceeded the equivalent ratio for liabilities, as shown in Chart 7. Of course, the fact that assets have an *ex post* cash-flow greater than that on liabilities does not necessarily mean that they are worth more. One possible explanation for the yield difference might be that the higher proportion of direct investment in assets means that the return is innately more risky, reflected in a higher discount rate.

**Chart 7**  
Yield on UK external assets and liabilities



## The external balance sheet in a macroeconomic context

Given the balance of payments and national accounts relationships discussed earlier, the net investment position can be seen as a measure of the cumulative effect of financing current account positions. A current account deficit must be matched by financial flows that have the effect of increasing the net claims of overseas residents on the non-financial assets of the economy, either through direct ownership or through ownership of financial claims. So a persistent deficit will progressively reduce the net worth of the economy unless it is offset by a decline in the value of the stock of

liabilities. Similarly, a persistent current account surplus will add to net worth unless the value of the stock of external claims falls.

Net positions built up in this way will have implications for future current account flows. For example, an increase in net liabilities is likely to result in higher future current account outflows, either through contractual obligations such as debt service payments or through profits accruing to overseas residents. So a consideration of the international investment position would be integral to a variety of macroeconomic modelling or simulation exercises, for example calculations to assess the sustainability of external sovereign debt.

Table B shows the UK international investment position in the context of the national balance sheet discussed earlier. The obvious feature is the small size of the net external position in relation to the total assets of the United Kingdom. At the end of 1998, when recorded net financial liabilities were at their peak, they were equivalent to almost 4% of the United Kingdom's total non-financial assets; at end-2001 they were less than 1%. This provides another indication that the net position is not significant in macroeconomic terms.

## The external balance sheet and financial stability issues

But as noted earlier, gross assets and liabilities are large, and have grown rapidly. The value of total external liabilities has risen from below 50% of total non-financial assets in 1993, to over 70% in 2001. Analysis of the size and structure of the gross external balance sheet may be useful in assessing financial stability, insofar as it helps to identify risks from cross-border investment and borrowing.

Growth in cross-border assets and liabilities does not of course necessarily imply that individual economic agents are exposed to greater risk. Widening the potential range of investments offers opportunities to diversify risk, especially for portfolio investors and

**Table B**  
UK national balance sheet

£ billions, end-year	1993	1994	1995	1996	1997	1998	1999	2000	2001
Tangible assets	2,650	2,667	2,681	2,874	3,057	3,311	3,592	3,972	4,212
Intangible assets	207	176	170	184	186	212	260	300	524
<b>Total non-financial assets</b>	<b>2,857</b>	<b>2,842</b>	<b>2,851</b>	<b>3,058</b>	<b>3,244</b>	<b>3,523</b>	<b>3,852</b>	<b>4,272</b>	<b>4,536</b>
Total net financial assets/liabilities = net international investment position	31	18	-23	-69	-75	-135	-81	-37	-25
<b>Total net worth</b>	<b>2,889</b>	<b>2,860</b>	<b>2,828</b>	<b>2,989</b>	<b>3,169</b>	<b>3,388</b>	<b>3,772</b>	<b>4,235</b>	<b>4,511</b>
IIP as a percentage of total non-financial assets	1.1%	0.6%	-0.8%	-2.3%	-2.3%	-3.8%	-2.1%	-0.9%	-0.6%

financial intermediaries. It seems reasonable to suppose that at least part of the substantial growth in cross-border assets and liabilities reflects portfolio diversification aimed at enhancing the risk/reward trade-off.

That said, there are particular aspects of cross-border financial activity that will increase either the incidence of risk, or the difficulty of controlling risk, compared with an equivalent transaction within the domestic sphere.

First, cross-border investment will entail an element of country risk, in addition to the risk inherent in the asset itself. For example, the ability of a firm to service its debt obligations may be influenced by its country of domicile. Its ability to make external payments or its access to liquidity may be dependent on government actions, such as the operation of exchange controls or controls on the domestic banking system. Notwithstanding the move towards liberalisation in international payments, country risk remains a significant factor in many emerging market economies.

Second, cross-border investment may involve an element of currency risk, unless economic agents put in place an effective hedging strategy. Mismatches of foreign currency liabilities and assets, combined with large discontinuous movements in exchange rates, have been a key element in some emerging market economies' defaults affecting both governments and the private sector.

In addition, some factors that would be of interest in analysing financial stability in a domestic context are also relevant in a cross-border context. One of these is

gearing. For example, a concentration of external liabilities in the form of debt, carrying contractual obligations to make regular payments of interest and to repay principal, will be suggestive of gearing risk if external assets consist primarily of portfolio equity or direct investment claims, where both income stream and capital values are uncertain.

Table C shows external assets and liabilities at end-2001 by sector and instrument. Data limitations mean that, for most categories of liability, private non-bank financial companies, private non-financial companies and households cannot be individually distinguished. They appear in the table as 'other sectors'.

Once again, the data need to be interpreted with some care. A key issue is the extent to which it is appropriate to aggregate the assets and liabilities of individual economic agents. The standard national accounts presentation, on which the external balance sheet is based, divides the economy into the public sector, household sector, monetary institutions, other financial intermediaries, and private non-financial corporations. The question is whether these sectors are sufficiently homogenous in their behaviour for the aggregate data in the external balance sheet to be a reliable guide to risks, or whether the aggregation conceals a wide variation in exposure to risk.

This question is perhaps most pertinent in the case of the non-financial corporate sector. The corporate sector is clearly a significant source of potential risk because its external assets and liabilities are large. Moreover, the opportunity to vary, in both assets and liabilities, debt and equity instruments, enables individual companies to assume a wide range of overall risk. For example, do low

**Table C**  
**UK external assets and liabilities by sector and instrument, end-2001**

	Assets								Liabilities						
	Direct investment	Portfolio equity	Portfolio bonds	Portfolio money market	Loans	Deposits	Other	Total	Direct investment	Portfolio equity	Portfolio bonds	Portfolio money market	Loans and deposits	Other	Total
Public	2	0	0	1	11	0	28	<b>40</b>	0	0	57	0	4	0	<b>61</b>
Monetary financial institutions	25	14	320	42	328	803	0	<b>1,532</b>	27	24	85	134	1,374	1	<b>1,644</b>
Other sectors	619	371	140	12	3	472	1	<b>1,618</b>	320	523	133	23	494	17	<b>1,510</b>
<i>Of which:</i>															
<i>Insurance companies and pension funds</i>	18	214	97	1	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<b><i>n.a.</i></b>	14	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<b><i>n.a.</i></b>
<i>OFls (a)</i>	40	135	34	5	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<b><i>n.a.</i></b>	27	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<b><i>n.a.</i></b>
<i>PNFCs (b)</i>	560	9	2	5	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<b><i>n.a.</i></b>	279	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<b><i>n.a.</i></b>
<i>Household sector</i>	1	13	8	0	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<b><i>n.a.</i></b>	0	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<b><i>n.a.</i></b>
<b>Total</b>	<b>645</b>	<b>385</b>	<b>460</b>	<b>54</b>	<b>342</b>	<b>1,275</b>	<b>29</b>	<b>3,190</b>	<b>347</b>	<b>547</b>	<b>275</b>	<b>156</b>	<b>1,872</b>	<b>18</b>	<b>3,215</b>

*n.a.* = not available.

(a) Other financial intermediaries.  
(b) Private non-financial corporations.

Totals may not sum of constituent figures due to rounding.

levels of aggregate corporate external debt indicate low external gearing in most firms—or might the debt be concentrated in particular firms? Similarly, if US dollar debt increases at the same time as direct investment assets in the United States, does this imply that the borrowing firms are the same as the investing ones and so, in an approximate way, are hedging their currency exposure? Or is the borrowing and investment being done by two separate groups? A further issue with the data is that they do not at present cover derivative instruments. A large number of both financial and non-financial companies will have external exposures through derivative instruments. These may be hedges, mitigating risk from items included in the external balance sheet, or they may add to the exposure already present. They will also enable fixed-rate liabilities to be transformed into floating or *vice versa* and foreign currency liabilities into sterling or *vice versa*.

Nevertheless, it may be possible from the aggregate numbers to form some conclusions of a probabilistic nature. The remainder of this article considers some common shocks and their likely impact on the various sectors.

### Impact of financial shocks

A higher general level of global interest rates will have two effects, one on the valuation of fixed-rate portfolio debt assets and liabilities and one on the ongoing service costs of floating-rate debt. Both are likely to have adverse consequences for the United Kingdom in aggregate. Overall, the United Kingdom has net portfolio debt assets, the majority of which may be assumed to be fixed rate. A uniform global increase in interest rates is likely to result in a fall in the value of net assets. However, the impact of this will vary between sectors. The public sector's net liabilities would be reduced on a marked-to-market basis, as would those of private non-financial corporations. The burden of falling bond prices would be felt by banks and other financial institutions and by the household sector, both through direct holdings of bonds and through beneficial ownership via collective investments.

On the assumption that the larger part of the monetary institutions' assets and liabilities are floating rate, net external interest payments would rise. The effect of this would ultimately be borne by other domestic sectors that are the counterpart to the banks' external position,

primarily the private corporate sector and the household sector.

The effect of a fall in the sterling exchange rate is harder to assess *ex ante*. The external balance sheet data do not permit a complete breakdown by currency. Even if they did, a net on-balance sheet external foreign currency exposure would not necessarily imply an exposure to currency risk. For example, net external foreign currency liabilities of the banking sector could be matched by net foreign currency assets *vis-à-vis* domestic sectors and/or currency swap transactions. In the case of PNFCs it would be quite common to see bond issues in foreign currencies swapped back into sterling.

But in general terms, all other things equal, a weaker sterling exchange rate is likely to result in a fall in aggregate net liabilities, since the United Kingdom (in common with other large economies) has a larger proportion of its liabilities denominated in domestic currency than its assets.

Similarly, a uniform fall in global equity prices will also reduce the value of net liabilities (all other things equal) because portfolio equity liabilities exceed portfolio assets. Effectively, foreign investors are assuming greater market risk exposure to UK companies than UK investors are taking in relation to overseas companies. But there is little information about the behaviour of direct investment values in relation to portfolio investment; and overall, the United Kingdom has a net exposure to corporate sector assets as a whole. More needs to be known about the structure of corporate assets and liabilities at the micro level in order to understand fully the risks for financial stability.

Caution is also needed in interpreting a fall in external financial liabilities due to marking to market as a positive development for the United Kingdom. Although this shows that the immediate impact of a shock has been sustained by foreign investors, it will also generally mean that the incremental cost of capital to borrowers has increased, and their ability to adjust their balance sheets has been impaired. So, for example, a company seeking to reduce gearing via a rights issue will find this harder if its share price has fallen. And it will be more expensive to switch from floating into fixed-rate liabilities if corporate bond spreads have widened.