The external balance sheet of the United Kingdom: implications for financial stability?

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This article looks at developments in the UK external balance sheet in the wider context of the UK economy and financial system. UK net external liabilities increased sharply in the late 1990s. This largely reflected changing asset values, including exchange rates, rather than financial flows. The currency composition of UK external assets and liabilities means that, other things being equal, a falling exchange rate would reduce UK net external liabilities via valuation changes. In addition, the way foreign direct investment is valued could mean that UK external assets are significantly underestimated. The article also analyses the impact of banking sector business on the UK external balance sheet. UK external short-term debt is large because of the scale of international banking activities. A comparatively small proportion of this is carried out by UK-owned banks.

Monitoring country balance sheets for financial stability

One lesson from recent international financial crises has been how important it is for national authorities to monitor risk exposures in their country's external balance sheet. The structure of the stocks of financial assets and liabilities that results from capital flows can be as important for risk management as the capital flows themselves. First, it affects a country's ability to withstand economic shocks. For example, a country with a large foreign currency exposure carries a risk of loss (or profit) from sudden changes in exchange rates. And second, the structure of the balance sheet may itself be a source of financial shocks. For example, a country with large short-term net external liabilities is exposed to refinancing risk, and could in the extreme suffer a liquidity crisis.

Problems with the structure of external balance sheets were important in a number of recent financial crises, including Mexico in 1994, Korea and Indonesia in 1997, Russia in 1998, and Brazil in early 1999.(1) For Mexico, Russia and Brazil, mismatches in the maturity and interest rate structure of public sector debt posed particular difficulties, whereas for Korea, liquidity mismatches in the banking sector contributed to the financial crisis. In both the Korean and Indonesian crises, the maturity structure of non-financial corporate sector debt also played an important role.

As risks can arise in a number of areas, it is advisable for authorities to monitor a range of balance sheet indicators, focusing on variables and relationships that have in the past indicated financial fragility.(2) The adequacy of a country's foreign exchange reserves and the size and structure of the economy's foreign currency debt are particularly relevant, especially for countries on a fixed exchange rate regime. Sound risk management by the public sector warrants particularly high priority. National authorities need to adopt prudent strategies and practices in managing their own debt liabilities and financial and other assets. They should identify the main economic risks to which they are exposed, either directly or indirectly (via the economy as a whole).(3) Bank regulators should measure and monitor liquidity

What is an external balance sheet?

The external balance sheet of a country is a summary of its financial relationship with the rest of the world. It is closely related to the balance of payments, and can be viewed as combining the stock of residents' financial investments in the rest of the world (assets) and the stock of financial investments into the country from the rest of the world (liabilities).

The external balance sheet of the United Kingdom is published annually by the Office for National Statistics (ONS) as part of the *United Kingdom Balance of Payments Pink Book*. Contingent assets and liabilities are not included, an increasingly important omission as the use of financial derivatives becomes more widespread.

The latest edition of *The Pink Book* was published in August 2000 showing data up to end-1999.(1)

(1) The ONS produces quarterly estimates of the UK external balance sheet. The latest quarterly data are for 2000 Q2; these have been used in this article where appropriate.

(1) See 'Improving the stability of the international financial system', Drage, J and Mann, F, *Bank of England Financial Stability Review*, June 1999.
(2) See 'Debt and reserves-related indicators of external vulnerability', IMF, 23 March 2000. Available at www.imf.org/external/np/pdr/debtres/index.htm
(3) See 'Report of the working group on capital flows', Financial Stability Forum, 5 April 2000. Available at www.fsforum.org/Reports/RepCF.html

mismatches in banks, in the domestic currency and foreign currencies. If necessary, governments should act to strengthen banking systems and prudential regulation. Other parts of the private sector are generally not regulated, but they should be subject to accounting and disclosure standards which require transparency about the structure of their financial obligations and claims.

An adverse signal from any individual indicator does not mean that a country inevitably faces crisis. Rather, indicators should be employed as warning lights, highlighting potential problems and prompting further investigation. A series of warnings may reflect escalating risks.

External balance sheets of developed economies

Although much of the recent international interest in external balance sheets has focused on emerging market economies, the analysis is also potentially useful for developed economies.(1) For example, a significant deterioration in a country's external balance sheet could indicate current account imbalances and might, in principle, lead to a loss of confidence in that economy. More generally, external balance sheets are useful for assessing the likely impact on particular sectors or institutions of a variety of external shocks such as global interest rate or business cycle shocks.(2)

There are a number of caveats, however, which should be kept in mind, particularly for large economies with complex financial systems, such as the United Kingdom.

First, in the National Accounts, the UK economy is defined on a residency basis: the activities of all institutions located within the United Kingdom's political frontiers are 'UK', those outside are 'non-resident'. However, the activities of some types of institution located in the United Kingdom may be less intimately connected than others with the stability of the UK financial system as a whole, and they may react differently to certain shocks.

Foreign banks and securities dealers operating in London are one possible example. Foreign institutions locate in London because it is the leading international financial centre in its time zone, which gives them access to deep and liquid markets, as well as local expertise. The business booked in London by these institutions will affect the UK external balance sheet. Some of their counterparties are outside the United Kingdom, they may provide financial intermediation predominantly for non-residents, and developments in their domestic economies may be more important than their activities in the United Kingdom to their financial health. The impact within the United Kingdom if they were to experience difficulties would differ from problems at a domestic bank; it would probably depend to an important extent on counterparty interlinkages within the financial system.

In contrast, the liabilities of, say, a Frankfurt branch of a domestic bank may not appear in the UK external balance sheet. As a complement to residency-based balance sheet analysis, it would be useful to be able to analyse a 'balance sheet' composed on a 'worldwide consolidated' basis, focusing on the activities of UK-owned institutions wherever they may be located.(3)

A second caveat is that balance sheet pressures do not arise from the external sector alone. In times of crisis, the risk of domestic capital flight can be high. It has sometimes occurred first, perhaps because domestic residents can be better informed about developments in an economy than are non-residents.

Third, an external balance sheet is the aggregation of the positions of many institutions. Even though, in aggregate, a sector may not be exposed to liquidity or currency mismatches, at a micro level some institutions may be. In the event of crisis, funds will not necessarily flow freely within the economy, so some institutions may face difficulties in an otherwise apparently robust sector.

Finally, the relationships between economic sectors and the rest of the world are complex. Developments should be evaluated in the context of the country's economy as a whole (eg prospective growth) and its position in the world financial system; that can be difficult for advanced industrial economies. The box opposite looks at a method of placing developments in the UK external balance sheet within the context of a UK national balance sheet.

Limitations of external balance sheet data

There are also technical limits on how much detail external balance sheets can provide. Compiling the external balance sheet of a major open economy such as the United Kingdom is a significant undertaking, involving a series of large-scale censuses and/or sample surveys of institutions and economic agents. A degree of imprecision is inevitable; given the immense sums involved (UK gross external assets and liabilities both exceeded £2 trillion at end-1999), margins of error can run into millions, if not billions, of pounds. So it is important not to place too much emphasis on precise figures or small changes over time.

Net figures should be treated with caution: a small error in gross figures can translate into significant inaccuracies when gross figures are netted. For example, between the 1999 and 2000 issues of *The Pink Book*, data for end-1998 were revised. The estimate of UK gross assets was revised down by 1.8%, and that of gross liabilities was revised up by 0.6%. These modest revisions led to a 74% increase in the estimate of net external liabilities to £118 billion.

(1) As recognised in the IMF's Special Data Dissemination Standard.
(2) Such an assessment needs also to draw on hypotheses about how debtors and creditors will behave in the face of the various shocks.
(3) Analogous to the Bank for International Settlements (BIS) international banking data, published on both a locational and a worldwide consolidated basis.

Placing the external balance sheet in the context of a national balance sheet

A narrow focus on the UK net external balance sheet position may give an incomplete picture of the United Kingdom's overall position relative to the rest of the world. One alternative is to consider the external position in the context of a national balance sheet.

J Y Henderson[1] defines a theoretically ideal national balance sheet. He states that, '*It would show values for land; known mineral wealth in the ground; all physical assets produced with human intervention such as producer durables, consumer durables and business inventories, including mineral wealth extracted from the ground; intangible assets … all contractual financial claims for which a regular owner-issuer relationship exists, and a capitalised value of human wealth*'.

In this context, capitalised human wealth can be viewed as the current market value of the store of economically productive abilities and information embodied in the population. For an individual, that could be thought of as the present discounted value (pdv) of the person's lifetime income stream minus the pdv of the income that they could have earned in the absence of any human capital—all other factors held unchanged.

With this in mind, one can characterise the United Kingdom as a conglomerate. Money GDP can then be thought of as the dividend paid by the conglomerate, and the dividend yield on the FTSE All-Share index can be used to calculate a very approximate market value for UK plc.[2]

Between 1996 and 1999, UK money GDP rose from £756 billion to £891 billion. The average dividend yield was 3%. This gives national balance sheet asset values of £25.2 trillion in 1996 and £29.7 trillion in 1999.[3] So while UK measured net external liabilities increased by £156 billion over the period, this is heavily outweighed by the £4.5 trillion increase in the value of total assets on the national balance sheet.

(1) 'The possible uses and scope of a national balance sheet for Australia', Henderson, J Y, *The Economic Record* (September 1972), The Australian National University.
(2) Of course, there are a number of important caveats to this method. For example, the dividend yield on the FTSE All-Share index will reflect the activities all over the world of companies listed on the London Stock Exchange. Also, the dividend yield will depend to some extent on the tax incentives to retain or distribute earnings.
(3) National balance sheet asset value = money GDP/dividend yield.

External balance sheet data for the United Kingdom are compiled from a series of institutional surveys conducted by the Office for National Statistics (ONS) and the Bank of England. The ONS has assessed the accuracy and reliability of data obtained from different sources. In general, data for the public and banking sectors are believed to be of the highest quality, followed by data for insurance companies and pension funds, and finally securities dealers (which is a concern given their scale), the corporate and household sectors. Annual data are generally of higher quality than quarterly data because some quarterly levels data are estimated imperfectly by cumulating financial flows and revaluing the result using relevant price indices.

When shocks occur, contingent assets and liabilities, such as derivatives, can have important consequences for international flows and asset price changes. However, at present, derivatives are treated as off balance sheet in the UK external balance sheet. This will change with the publication of the 2001 issue of *The Pink Book*, when the UK National Accounts become BPM5-compliant.[1] The inclusion of derivatives positions will inflate gross claims and obligations significantly. Data for banks currently available give some idea of the scale of the increase. They show that banks' external gross derivatives assets and liabilities positions were £390 billion and £388 billion respectively at end-1999.

Finally, not all asset stocks are recorded at comparable market values. Most significantly, stocks of foreign direct investment (FDI) are recorded in the accounts at book value, as discussed below.

Recent developments in the UK external balance sheet

At end-1999, UK gross external assets were £2.3 trillion, an increase of 11% (£231 billion) on the previous year, and UK gross external liabilities were £2.5 trillion, an increase of 12% (£261 billion); see Table A. Chart 1 shows that in both real and nominal terms the UK external balance sheet has grown very strongly for most of the past decade. UK external assets were some 180% of GDP in 1990, but are now more than 260% of GDP.

(1) Balance of payments manual (5th edition), published by the IMF. The aim of BPM5 is '...developing and promulgating appropriate international guidelines for the compilation of sound and timely balance of payments statistics'.

Table A
UK external balance sheet(a)

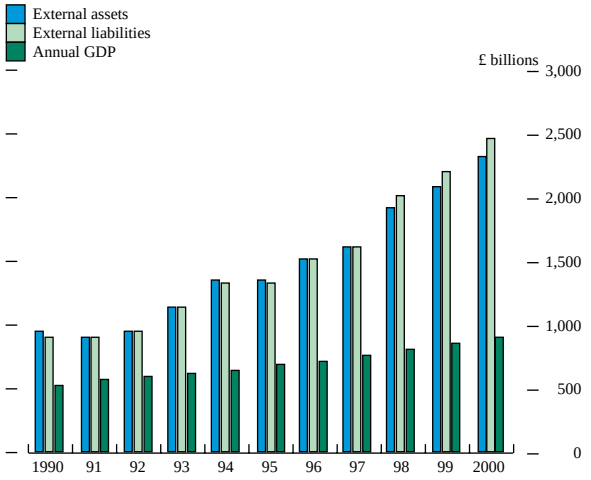
£ billions

	1990		1997		1998		1999		2000 H1	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Direct investment	121	114	226	167	301	193	419	243	567	276
Portfolio investment										
Debt	96	130	344	282	382	274	372	307	416	337
Equity	101	59	282	306	304	412	400	576	404	653
Other investment	556	602	1,066	1,269	1,103	1,351	1,131	1,365	1,354	1,633
Reserve assets	22		23		23		22		23	
Total	**896**	**905**	**1,942**	**2,025**	**2,113**	**2,231**	**2,343**	**2,491**	**2,763**	**2,898**
Memorandum items:										
Balance of payments										
Current account		-19.5		6.6		-0.1		-11.0		-2.5
Capital account		0.5		0.8		0.5		0.8		0.7
Financial account		17.5		-13.2		-4.7		5.9		-0.0
Errors and omissions		1.5		5.8		4.3		4.4		1.8

(a) For definitions of balance sheet instruments see the glossary on page 364.

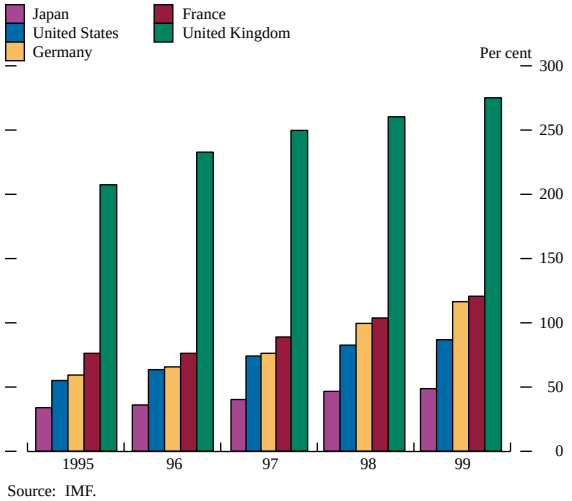
Furthermore, UK external assets and liabilities are very large by international standards. Chart 2 shows international liabilities as a share of GDP for Japan, the United States, Germany, France and the United Kingdom. The chart highlights how much larger UK external liabilities are (as a share of GDP) than for the other major economies.

Chart 1
UK gross external assets and liabilities



Source: ONS.

Chart 2
Major economies' gross external liabilities as a percentage of GDP



Source: IMF.

With the exception of Japan, there has been a marked rise in external liabilities as a proportion of GDP over the past five years. This would seem to point to a further deepening of international capital markets in the second half of the 1990s despite periods of turbulence. A large current account surplus and a lack of international demand for Japanese assets (as a result of domestic economic weakness and low nominal rates of return) together probably explain the modest increase in Japan's external liabilities. Table B gives the cumulative change in gross external liabilities for each of the major economies over the past five years.

Table B
Cumulative changes in external liabilities 1995–99

US$ billions

United States	+3,944
United Kingdom	+1,653
Germany	+970
France	+536
Japan	+369

Net balance sheet position

At end-1999, the United Kingdom had net external liabilities of £148 billion (some 17% of annual GDP), an increase of £30 billion from end-1998. Although the United Kingdom has had net external liabilities since 1996, this is unusual in recent UK economic history. During the two decades up to 1996, the United Kingdom had net external assets in every year except 1990. However, as Chart 3 shows, since 1993 there has been a steady shift in the balance of external assets and liabilities.

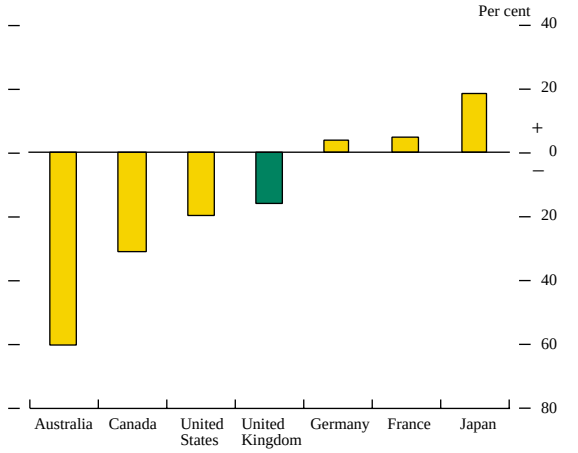
Chart 4 shows the ratio of net external assets to GDP for a number of developed economies. The chart shows that the United Kingdom has a similar net liability position to the United States, but a much smaller net liability position than Canada or Australia. France and Germany have modest, and Japan very large, net external asset positions.

For the United States and Japan, their respective net deficit and surplus positions have been well established since the start of the 1990s. Germany's net asset position has remained fairly stable, while the French position has switched from one of marginal net deficit to a net surplus (see Chart 5).

Chart 3
UK net external balance sheet position

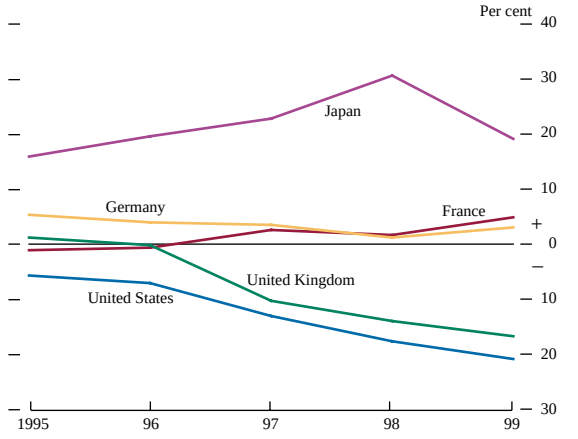
Source: ONS.

Chart 4
International comparison of countries' net external balance sheet positions as a share of GDP (end-1999)



Source: IMF.

Chart 5
International comparison of countries' net external balance sheet position as a share of GDP



Source: IMF.

Developments in a country's net external position can often be traced to the evolution of the current account. This is because the financial account (international capital flows that increase or decrease a country's external assets and liabilities) plus the much smaller capital account are the counterpart to the current account.(1) For example, in order to finance a current account deficit, domestic residents take in funds from non-residents or run down external assets, or some combination, and hence their net external liabilities increase.

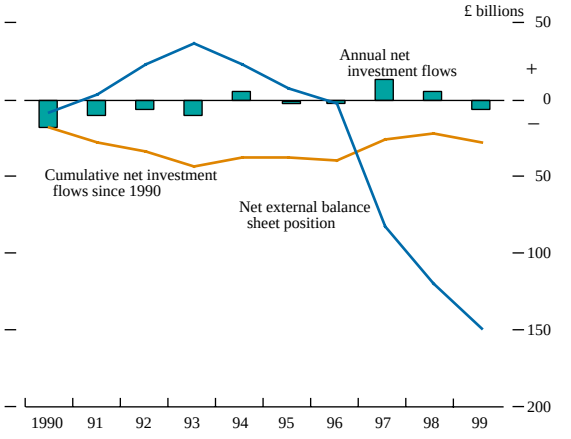
In Germany, there was a cumulative current account deficit of $54 billion in the five years to end-1999, during which Germany's net external asset position fell by $131 billion. In the United States, current account deficits over the period summed to $946 billion. This equates to around half of the $1,741 billion increase in net external liabilities.

For the United Kingdom, the link between the external balance sheet position and the current account position is less clear. The United Kingdom's large current account deficits in the early 1990s led to large net financial inflows to the UK economy (see Chart 6), but the UK net external asset position increased. Since 1993, the UK current account has been fairly close to balance (though there was a current account deficit of £11 billion in 1999), and net financial inflows have been modest. Yet, since 1993, UK net external liabilities have increased by nearly £200 billion. Revaluations—changes in the value of the *stock* of existing assets and liabilities—are therefore the key.

Revaluations

Chart 7 shows changes in the UK net external balance sheet position broken down into international investment flows and revaluations of existing assets and liabilities.(2) The

Chart 6
UK external balance sheet and international financial flows

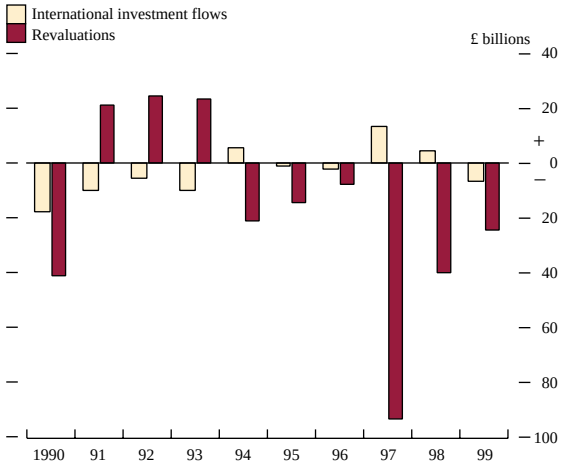


Source: ONS.

(1) In the UK National Accounts, any difference between the financial account and current account is attributed to 'errors and omissions'. Errors and omissions can often be large, highlighting the caution with which all national accounts data should be treated. According to the ONS, errors and omissions are most likely to reflect misreporting of the financial account. For definitions of current, capital and financial accounts, see the glossary on page 364.
(2) Revaluations are determined by residual, ie any change in the gross position not attributable to a financial flow is a 'revaluation'.

chart shows that revaluations have been more important than financial flows in determining the net change in the external balance sheet position in every year of the past decade. Revaluations boosted UK net external assets in 1991, 1992, and 1993, more than offsetting the net financial inflows caused by the current account deficits. In the latter part of the 1990s, revaluations had a strongly negative impact on the net external position.

Chart 7
Changes in UK net external assets



Source: ONS.

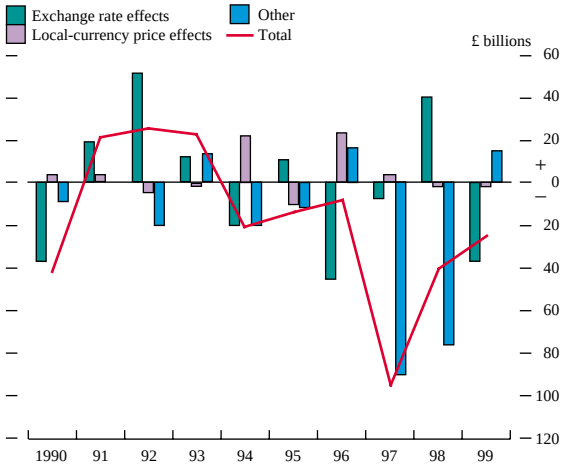
It is possible to decompose revaluations into local-currency price effects, exchange rate effects and other effects. This process is not exact (the 'other' category is a residual and can be substantial). Nevertheless it does give some indication of the relative importance of the factors that have been driving these revaluations.

Chart 8 sets out the Bank's estimates of this decomposition of net revaluations over the past decade. The chart shows how, in the early 1990s, sterling's depreciation led to positive currency revaluations in the UK net external balance sheet. In the latter part of the 1990s, as sterling strengthened, currency revaluations generally had a negative impact on the UK net external balance sheet. For example, in 1996 sterling strengthened by around 10% against both the US dollar and the (synthetic) euro, and in 1999 sterling appreciated by around 12% against the euro (remaining broadly unchanged against the US dollar). In both years the currency revaluations were sharply negative.

This inverse relationship reflects the fact that, with the exception of cross-border banking business, which is broadly exchange rate neutral,(1) the majority of UK external liabilities are denominated in sterling and the majority of UK external assets are denominated in foreign currencies. Other things being equal, a rise in the value of sterling will lead to a fall in the sterling value of foreign currency denominated assets—hence the sterling value of UK external assets falls in relation to the sterling value of the liabilities.

The second type of revaluation shown in Chart 8 is the effect of changes in local-currency asset prices. These made a positive contribution to UK net external assets in 1996, generated by the difference in performance between the domestic and overseas equity markets. The value of UK holdings of overseas equities (predominantly US and continental European equities) rose by more than the value of overseas holdings of UK equities. (The US and major continental equity markets rose by more than 20% in 1996, compared with an increase of 12% for the UK equity market.)

Chart 8
Revaluations of the UK net external asset position



Source: ONS.

The 'other' valuation category was very large in 1997 and 1998. In 1997, this reflected the finding by the ONS triennial Share Register Survey that substantial non-resident holdings of UK equities had not been included in the estimates for 1995 and 1996. The ONS is aiming to undertake a substantial revision of back-data over the coming year. As a result, the 1995 and 1996 estimates of equity portfolio investment in the United Kingdom are likely to be subject to upward revisions. The cause of the large 'other' effect in 1998 has not yet been identified.

Another way of viewing revaluations is as capital gains on the external assets and liabilities. The box on pages 358–59 looks at rates of returns generated on the external balance sheet, taking into account both investment income earned/paid and capital gains/losses on the balance sheet.

Disaggregating the external balance sheet

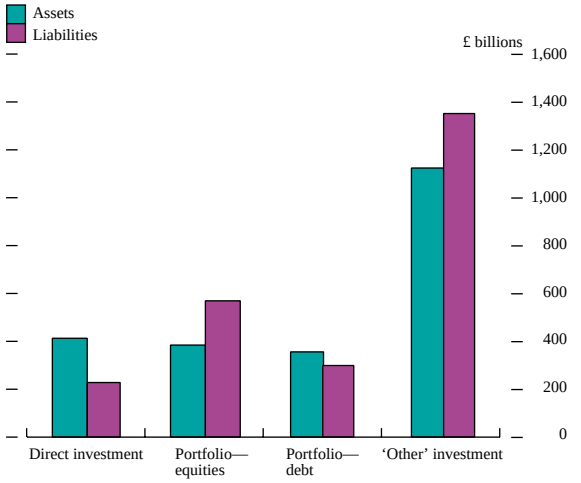
Insights can be gained into the development of the UK external balance sheet by disaggregating the data according to the type of financial instrument used to carry out the investment. Chart 9 shows UK gross external assets and liabilities for the four main types of international investment (for their definitions see the Glossary).

At end-1999, some 18% (£419 billion) of gross UK external assets and some 10% (£243 billion) of gross UK external

(1) See the section on external banking in the United Kingdom on pages 361–63.

liabilities were in direct investment. Portfolio investment accounted for around a third of UK gross external assets and liabilities (£772 billion and £883 billion respectively). For both assets and liabilities, portfolio holdings of equities were larger than portfolio holdings of debt securities. The largest category on both sides of the balance sheet is 'other' investment (largely international banking claims and obligations), which accounted for approximately half of both external assets and liabilities at end-1999 (£1.1 trillion and £1.4 trillion respectively). The final, smallest, category of the UK international investment position is UK reserve assets (not shown in Chart 9), which stood at £22 billion at end-1999.

Chart 9
UK gross external assets and liabilities by instrument type (end-1999)



Source: ONS.

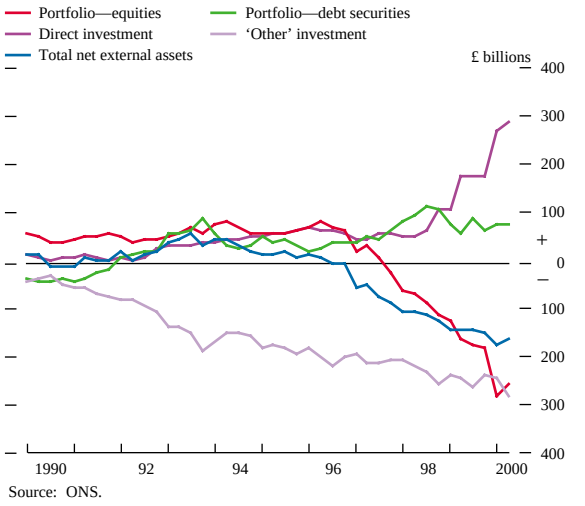
In net terms, the United Kingdom is 'long' direct investment and portfolio holdings of debt securities, but 'short' portfolio holdings of equities and 'other' investment. At end-1999, the United Kingdom had net direct investment assets of £175 billion, net holdings of debt securities of £65 billion, but net equity security liabilities of £176 billion and net 'other' investment liabilities of £235 billion.

As Chart 10 shows, the United Kingdom has had a large and growing net liability position in 'other' investment for a decade. However, this does not, in itself, explain why the UK overall net liability position has increased so markedly over the past four years. Rather, the aggregate movements of the other types of investment are the key. Before 1996, the growth in portfolio plus direct investment offset the decline in the 'other' investment balance. It is only since 1996, when net positions for both groups of instruments have been falling, that the UK net liability position has started to increase rapidly. The analysis below looks first at developments in direct and portfolio investment, before turning to 'other' investment.

Direct and portfolio investment

One of the most interesting trends in the UK net external position is the substantial rise in UK net direct investment abroad to £175 billion at end-1999, and the similar fall in UK net portfolio holdings of overseas equities over the past few years to -£176 billion. These developments have been related and reflect the recent, rapid growth in the value of international mergers and acquisitions activity (M&A).

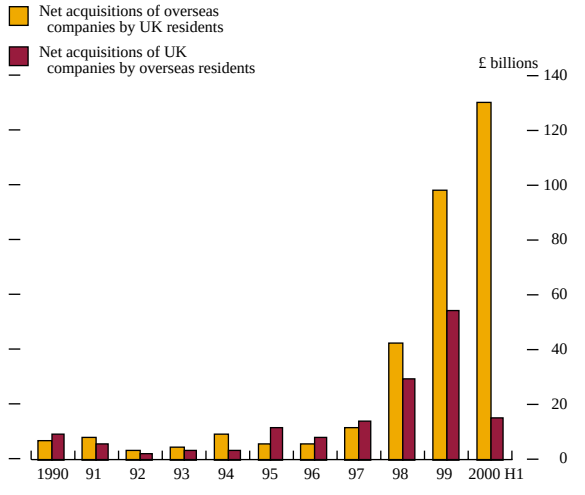
Chart 10
UK net external assets by instrument type



Source: ONS.

Though the number of mergers and acquisitions has not been unusual, M&A activity by value has grown to record highs in each of the past three years (see Chart 11). Furthermore, UK companies have been particularly acquisitive. UK acquisitions of overseas companies outstripped acquisitions of UK companies by overseas companies by £43 billion in 1999 and a remarkable £115 billion in the first half of 2000. Table C shows a list of the largest international acquisitions involving UK companies over the past two and a half years.

Chart 11
International mergers and acquisitions involving UK companies



Source: ONS.

International mergers and acquisitions typically affect the external balance sheet in two places. For the United Kingdom, the acquisition of an overseas company is

Rates of return

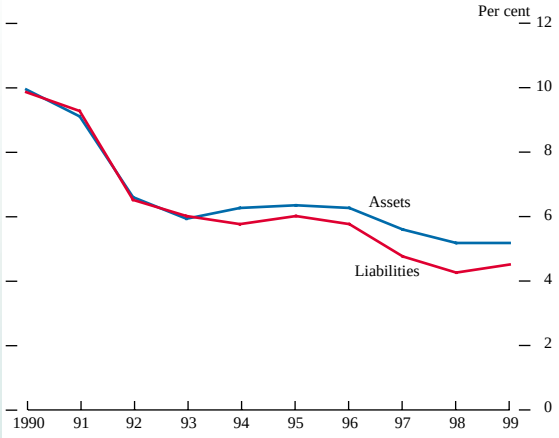
One of the most interesting links in the National Accounts is that between the external balance sheet and the investment income account. The investment income account covers earnings, for example profits, dividends, and interest payments and receipts arising from foreign investment and external financial assets and liabilities. By dividing credits and debits paid on assets/liabilities by the stocks of assets and liabilities, the implied rates of return can be calculated.

In 1999, the United Kingdom earned £109 billion on its overseas assets (unchanged from 1998); given external assets of £2,113 billion at end-1998, this suggests an annual rate of return of 5.2%. Payments abroad on external liabilities rose to £101 billion in 1999 (from £95 billion in 1998); given external liabilities of £2,231 billion, this suggests an annual rate of return of 4.5%. Chart A shows how these nominal rates of return declined over the 1990s as inflation fell in the major economies.

Chart B shows full rates of return on assets and liabilities, which take into account both income received/paid and capital gains/losses on the assets and liabilities during the period. The chart demonstrates that there was no clear pattern over the period. (The spike in returns on liabilities in 1997 reflects a revision to overseas holdings of UK equities in the 1997 Share Register Survey. We calculate that this added 3.8 percentage points to the full rate of return on liabilities, without which it would have been broadly equal to that on assets.)

Returning to 'income only' rates of return, Chart A shows that since 1994 the yield on assets has clearly exceeded that on liabilities. For 1994–97 inclusive, higher returns on direct investment and portfolio investment debt assets relative to liabilities explained the outperformance. In 1998–99 returns on 'other' investment assets moved ahead of those on 'other' investment liabilities to maintain the differential. Income earned on other investment makes up nearly a half of the total income debits and credits included in the current account. In order to examine this item in greater detail it is necessary to focus on the banking sector's external balance sheet.

Chart A
UK external assets and liabilities rates of return (income only)



Source: ONS.

recorded as direct investment abroad. However, when the purchase is paid for wholly or partly with equity, the acquisition will also boost overseas portfolio holdings of UK equities. The (predominantly) overseas shareholders in the overseas company receive shares in the UK company as payment, and hence have made a portfolio investment in the United Kingdom.(1) Overseas holdings of UK equities will therefore be boosted for as long as overseas investors retain an increased investment in the UK equity market.

As international mergers and acquisitions tend to have an offsetting impact on the two sides of the UK external balance sheet, they boost both *gross* external assets and liabilities, but will not, in themselves, affect the *net* external position. However, differences in the way they are measured mean that they are likely to have an impact on the net position over time. This is because, whereas portfolio investment is recorded at market value and is revalued every quarter, direct investment is recorded at book value and will be revalued only infrequently. Over time, the recorded value of the portfolio investment is likely to exceed the recorded value of the direct investment, and by a growing margin. The fact that direct investment may be under-recorded compared with the rest of the balance sheet is particularly important for the United Kingdom, as it has typically had net direct investment assets (as Chart 10 illustrates).

Table C
Major cross-border acquisitions involving UK companies 1998–2000 H1(a)

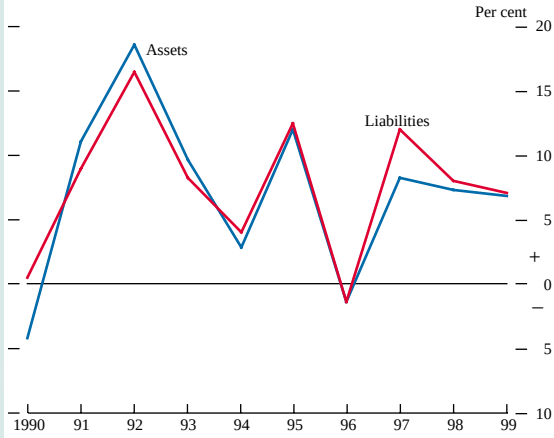
Acquirer	Acquired	Value (b) £ billions
1998		
BP	Amoco	33
1999		
Zeneca	Astra	21
Vodafone	Airtouch	39
BAT	Rothmans Intl BV	5
Deutsche Telekom	One 2 One	7
Mannesmann	Orange	20
Wal-Mart Stores	Asda	7
2000 H1 (c)		
Vodafone Airtouch	Mannesmann	101
BP Amoco	Atlantic Richfield	18

Source: ONS.

(a) Major acquisitions defined as those valued at £5 billion and above. UK companies shown in blue, overseas companies in red.
(b) As reported in the Press.
(c) Deals completed by end-June 2000.

(1) For example, assume the UK company is a wholly UK business, and the German company is a wholly German business. The German shareholders swap a holding in a wholly German business for a holding in a mixed UK/German business which, in the data, shows up as an investment in the United Kingdom.

Chart B
UK external assets and liabilities rates of return (income plus capital gains)

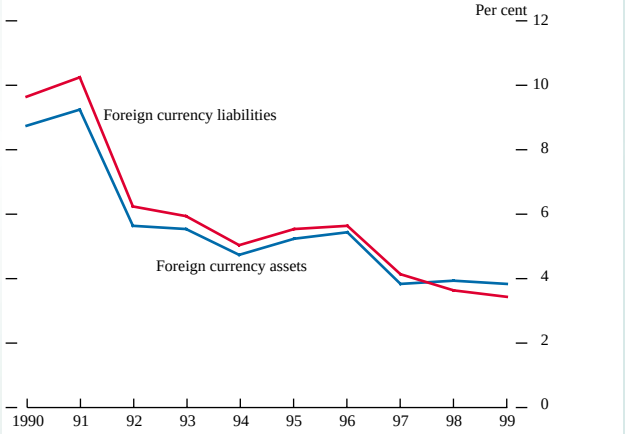


Source: ONS.

At the end of 1999 the UK banking sector had external assets and liabilities of £1,124 billion and £1,215 billion respectively. These levels are close to a half of the total assets and liabilities on the UK external balance sheet. Of the banks' holdings, both assets and liabilities are dominated by 'other' investments—these stood at £841 billion and £1,028 billion at the year-end. Of these other investments, almost 85% of each is made up of foreign currency loans and deposits. The income generated by these foreign currency assets/liabilities accounts for close to 30% of the United Kingdom's total credits/debits on overseas assets and liabilities.

Chart C contrasts the 'income only' rates of return on banks' 'other' investment foreign currency assets and liabilities. It shows that at the start of the decade the yield on liabilities was close to 1 percentage point higher than that on assets. The difference subsequently fell and in 1998–99 the return on assets exceeded that on liabilities.

Chart C
'Other' investment foreign currency assets and liabilities rates of return (income only)



Source: ONS.

The narrowing and subsequent crossover of rates of return is probably due to the reversal over the decade of the differential between the interest paid by UK borrowers on overseas liabilities and that on claims by UK banks on debtors in the rest of the world.

Valuing direct investment

Previous *Quarterly Bulletin* articles in this series have highlighted the fact that calculating direct investment at market valuation might significantly increase the United Kingdom's net external asset position. The box overleaf discusses the issue of calculating direct investment and updates an early-1990s study for the CSO,(1) aimed at producing estimates of direct investment at market value. The results suggest that, using market values, UK net direct investment assets at end-1999 would increase from £175 billion, perhaps to more than £800 billion. On this basis, the United Kingdom would have total net external assets of more than £450 billion, compared with the net external liabilities of £150 billion on the current valuation measure.

It should be noted that the large increase in the UK net direct investment position over the past three years has been driven by a relatively small number of large UK companies acquiring overseas assets. In future years this pattern could easily be reversed, and the measured direct investment gap could narrow.

Overseas holdings of UK equities

Another (related) trend in the UK external balance sheet is the rising share of the UK equity market held by overseas residents. In 1994, overseas residents held less than 15% (by value) of the total UK equity market. By end-1999, this figure had risen to more than 30%. The most important factor driving this trend has been the pattern of M&A activity described above. A second factor has been the move to UK residency of a number of international, particularly South African, companies. For example, Anglo American, Old Mutual and South African Breweries (total market capitalisation of £26 billion at end-1999) all moved residency from South Africa to the United Kingdom during 1999. These companies have retained, initially at least, a predominantly non-British investor base, boosting measured overseas investment in the UK equity market.(2)

The growth in cross-national holdings of equities can be seen as part of a trend of international investor diversification. For example, European and euro-area equity indices are becoming increasingly popular and institutions are starting to analyse European companies on a sectoral

(1) The CSO was the predecessor to the ONS.
(2) The South African operations of these companies have boosted the stock of outward direct investment from the United Kingdom.

FDI valuation at market prices

Direct investment is investment that '*adds to, deducts from or acquires a lasting interest in an enterprise operating in an economy other than that of the investor, the investor's purpose being to have an effective voice in the management of the enterprise. An effective voice is taken as equivalent to a holding of 10% or more in the foreign enterprise*'.(1)

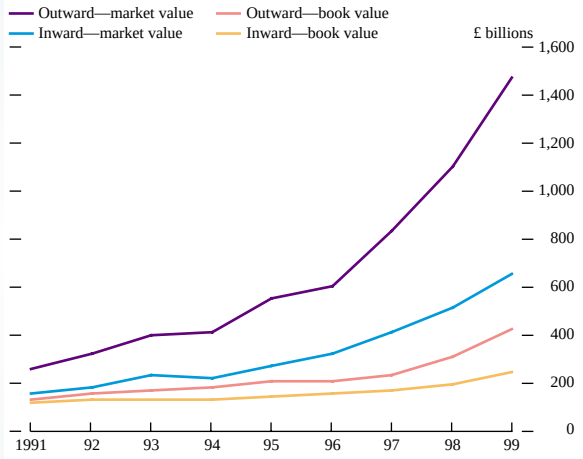
Direct investment is usually more costly to reverse than portfolio investment. This suggests that its determinants will generally be of a longer-term nature than those motivating portfolio investment. The higher relative cost of reversing direct investment suggests that it may provide more information on longer-term trends in international economic integration. The problem is measurement. The ONS Business Monitor states '*The levels of (direct) investment are at book value and these are likely to be significantly different from current market values, as book values tend to reflect values at earlier periods when assets were acquired or subsequently revalued*.'

Below we update a study by Pratten aimed at producing estimates of direct investment at market value.(2) For a fairly large sample of companies (more than 160 in each direction), Pratten used proportions of profits generated domestically and overseas to subdivide market values into domestic and overseas components. These were compared with aggregate book values collected in surveys to derive ratios of the relationship between market and book value. (Pratten estimates that for 1991 the market value of the stock of outward direct investment was 2.05 times book value, and for inward was 1.25 times.)

Repeating Pratten's exercise over a number of years to produce a time series is impractical. We have therefore revalued his estimates forward to 1999 using changes in equity market indices as a proxy for changes in the market value of direct investment stocks. In addition, outward direct investment is adjusted for estimated exchange rate movements.

The chart compares the published book values of direct investment with an estimate of their market values. The chart shows how much higher figures for market value are than book value, and also shows a growing divergence between the two measures during the past four years. For end-1999, the book value of UK direct investment assets is £419 billion, but the market value estimate is £1,473 billion. The corresponding figures for liabilities are £243 billion and £658 billion. As a result, UK net direct investment assets would be more than £800 billion using market values, compared with the published £175 billion for book values.

UK direct investment: book value and market value estimates



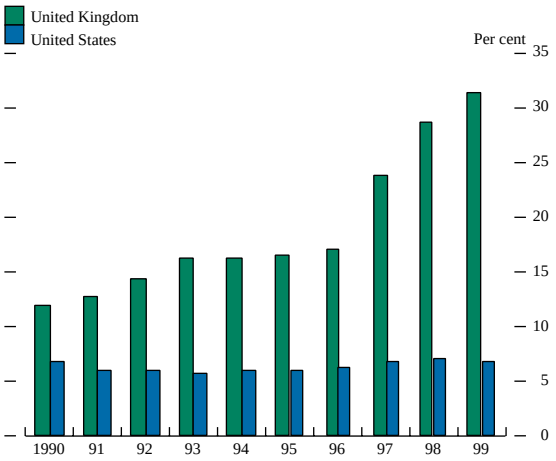
Sources: ONS and Bank of England.

Exchange rate movements are not responsible for the difference between book and market values. Between end-1995 and end-1999, sterling appreciated by 33% against the euro(3) and by 5% against the US dollar, depressing the sterling value of UK direct investment assets relative to liabilities. Rather, it is the very strong growth of equity prices in recent years, and the underperformance of the UK equity market relative to those in some other major economies, that has been key. While the UK market (FTSE 100) rose by 88% between end-1995 and end-1999, the US (S&P 500) and continental European (FTSE Eurotop 100) equity markets rose by 139% and 173% respectively.

(1) ONS Business Monitor MA4 (Overseas direct investment 1998), page 100.
(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) A synthetic euro was used for 1996–98.

rather than a national basis. However, the very strong rise in overseas holdings of UK equities over the past decade has not been replicated in the US equity market, for example (see Chart 12).

Chart 12
Non-resident holdings of domestic equities (as share of total market capitalisation)



Sources: ONS and Board of Governors of the Federal Reserve System: 'Flow of funds accounts of the United States'.

Some have argued that large overseas holdings of domestic equities could be a source of instability for the United Kingdom if, for example, overseas investors lose confidence in the UK economy. However, it is often the case that domestic investors react quickest during a crisis because they tend to have access to better information than overseas investors. Overseas holdings of UK equities also pose a different type of risk from overseas holdings of UK debt securities. This is because, with equity, there is no obligation to service the liability or repay the principal. So falls in the value of equity holdings are less likely to put institutions directly under liquidity pressure, though they can still erode collateral values and increase the cost of capital.

'Other' investment

Though the term 'other' investment suggests a minor, residual category, it is in fact the largest component of the UK external balance sheet. The United Kingdom's 'other' investment assets were £1.1 trillion at end-1999 and other investment liabilities were £1.4 trillion. 'Other' investment is important for financial stability purposes because it includes various types of external bank lending, which are the most liquid forms of investment and can therefore be moved rapidly. Furthermore, financial institutions are especially vulnerable in crises because they are usually highly geared and are often exposed to maturity and other mismatches.

'Other' investment consists of all bank lending and deposits between UK residents and non-resident banks, and between UK banks and non-residents.(1) By far the largest and most important component is the external business of UK banks, which accounted for £1.0 trillion of the United Kingdom's £1.4 trillion total 'other' investment liabilities at end-1999. The UK non-banking sectors had £329 billion of borrowing from overseas banks at end-1999. Of this, around £207 billion was attributable to securities dealers, and £107 billion to other financial institutions, and the corporate and household sectors.

The following section, using additional data published in *Bank of England Monetary and Financial Statistics*, but not published in *The Pink Book*, looks at the international business of the UK banking sector in more detail.

External banking in the United Kingdom

Deposits by non-residents with UK banks stood at £1,027 billion at end-1999. This total is very large by international standards, and easily exceeds annual UK GDP. For many countries (particularly emerging market economies), similar-sized 'other' investment liabilities (either in absolute terms or relative to GDP) would be considered a significant source of risk. However, for a country with a large financial centre, such as the United Kingdom, the interpretation is less clear, and the financial stability risks depend on the interaction between the international banking business and the domestic financial system.

A comparatively small percentage of UK external banking is carried out in sterling (ie in the domestic currency). At end-1999, non-residents had deposited £167 billion in sterling with UK banks, less than 20% of the UK banking sector's total external borrowing. This is significantly lower than the proportion of deposits denominated in either US dollars or euro.

UK-owned banks carry out a comparatively small proportion of UK external banking business. The United Kingdom is home to offices of hundreds of foreign banks, many of which use London to conduct the majority of their wholesale business. As such, only around 20% (some £200 billion as at end-1999) of the overseas deposits placed with banks in the United Kingdom were placed with UK-owned banks. In comparison, deposits by foreign residents with UK offices of banks from other EU countries were around £400 billion at end-1999, some 40% of the total (see Chart 13).

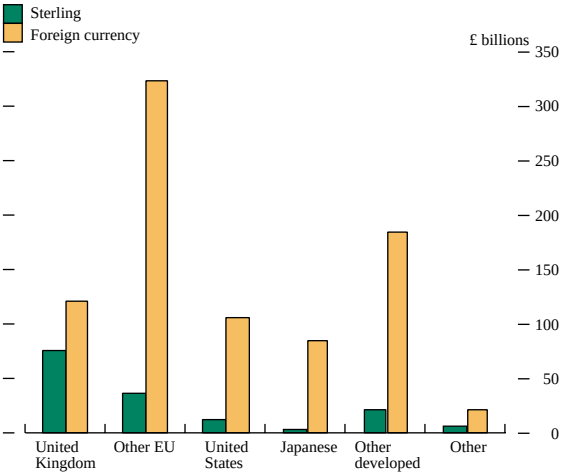
In fact, UK external banking is dominated by transactions between UK offices and non-resident offices of the same institutions. Approximately a half of all deposits by overseas residents with UK banks are placed by non-resident offices of the UK banks in question. A similar percentage of the lending of UK banks abroad is to the banks' non-resident offices.

Given the dominance of international interbank and intra-institution lending in the data, the concept of gross external debt does not seem to be particularly revealing in

(1) Plus corporate-to-corporate trade credit.

terms of the domestic UK economy. International interbank business creates financial risks, but they are as much risks to the international financial system as they are to the national external balance sheet *per se*. Given London's position as a large international financial centre, the Bank of England's financial stability responsibilities require that attention be paid to these international as well as specifically domestic risks. Nevertheless, for the purposes of analysing direct risks to the UK domestic economy from the UK external balance sheet, it is useful to focus on the net borrowing by banks in the United Kingdom from overseas, ie the extent to which UK banks are dependent on non-resident institutions for funds.

Chart 13
External borrowing by UK banking sector; end-1999



Source: Bank of England.

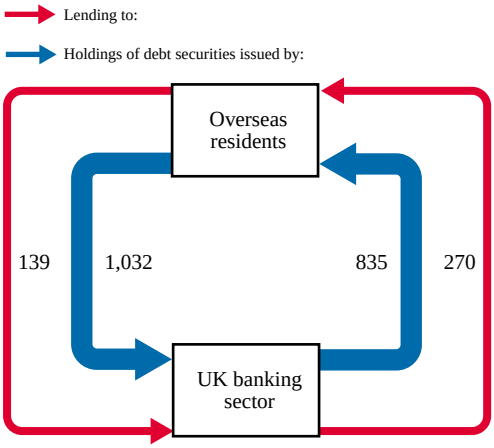
Net borrowing

At end-1999, *net* UK bank borrowing from abroad stood at some £195 billion, accounting for most of the United Kingdom's net liability position in 'other' investment. Of this, some £65 billion was denominated in sterling and £130 billion in foreign currency. However, rather than these funds being used directly in the UK economy, most are redirected abroad. This reflects the fact that banks in the United Kingdom are substantial net borrowers from non-residents, but are also net investors in debt securities issued by non-residents. This is particularly true for foreign currency borrowing.

Including holdings of debt securities (both non-resident holdings of UK bank debt securities and UK banks' holdings of debt securities issued by non-residents), the net debt of the UK banking sector to non-residents was some £70 billion at end-1999, significantly lower than the net *borrowing* total of £195 billion (see Chart 14). Indeed, on this basis, the UK banks had in effect a flat position in foreign currency, with virtually all of the £70 billion net debt position being denominated in sterling.

In effect, the UK banking system is carrying out maturity transformation in foreign currency—taking short-term deposits from abroad and investing the funds in long-term debt securities issued by non-residents. This could potentially expose the banking system to liquidity risk. However, any risks will be mitigated if the bonds held are tradable in deep and liquid markets, and so could be liquidated at little cost.

Chart 14
International assets and liabilities[(a)] of the UK banking sector; end-1999



Source: Bank of England.

(a) Debt only.

In contrast, the £70 billion sterling net debt of the UK banking sector can largely be linked to the UK current account deficit (and particularly the deficits of the early 1990s described earlier). This is because UK residents can finance current account deficits either through direct borrowing overseas or indirectly though the domestic banking system. Many smaller firms and households are likely to have limited access to overseas financial markets, so, to the extent that these residents rely primarily on the banking system, the UK banking sector's net borrowing from overseas will rise with the UK current account deficit. Thus the stock of net external bank debt will tend to increase with cumulative current account deficits/surpluses.

Though the concept of external lending is useful for analysing the banking sector, it is as important to assess the banking sector in other ways too. For example, the foreign currency position of the UK banking sector is important irrespective of whether the foreign currency liabilities are to UK residents or non-residents. Taking into account all on balance sheet assets and liabilities, the UK banking sector usually runs a neutral foreign currency position. For example, at end-1999, the UK banking sector had net foreign currency assets of £2.5 billion compared with total foreign currency assets of £1,322 billion.

Of even greater importance for financial stability is the liquidity structure of the banks' balance sheets. If banks have significant short-term liabilities and long-term assets denominated in either sterling or foreign currency, they face the risk of a liquidity squeeze. These risks will be mitigated

to the extent that the banks manage their liquidity prudently.(1)

Reserves and the public sector

The other key element of the national balance sheet for financial stability purposes is the public sector. Though the United Kingdom has relatively low foreign currency reserves by international comparisons (less than 3% of annual GDP), this is more than offset by the very strong position of the rest of the UK public sector.

The UK public sector has little external debt. Overseas holdings of British government stocks were £55 billion at end-1999, 17% of the total stock of gilts. This ratio is lower than in most other developed economies.

The UK public sector also has little foreign currency debt, just 2.7% of total debt at end-1999 (compared with 3.5% at end-1998). Furthermore, a breakdown of central government liabilities by maturity shows that liabilities of less than one year represent less than a quarter of the total (and largely consist of National Savings obligations). For both sterling and foreign currency, the great majority of gilts have a residual maturity of more than one year, and the average maturity of gilts is around ten years. So the maturity or currency structure of public sector debt is unlikely to be a source of vulnerability.

Implications for financial stability?

The United Kingdom has seen a sharp increase in its net external liabilities over the past few years, and this article has outlined three factors that help to explain why this has happened. First, current account deficits in the late 1980s and early 1990s led to financial flows into the United Kingdom, primarily via the banking sector. Second, revaluation effects have been particularly important. The weakness of sterling in the early 1990s led to positive revaluations of UK external assets. This partly masked the decrease in UK net external assets accompanying the current account deficits of the late 1980s/early 1990s.

Subsequently, the strength of sterling since 1996 has led to downward revaluations in UK external assets, and so to an increase in net liabilities. Revaluations were also affected by the United Kingdom having become 'short' equities, which have outperformed other forms of investment in recent years. Finally, measurement issues are important. The United Kingdom has large and growing net direct investment assets, but direct investment is recorded at book value—this probably means that UK external assets are now significantly understated.

Given these developments, it is important to assess the financial stability implications of the structure of the UK external balance sheet, and whether it could trigger or exacerbate any adverse shocks. One important feature of the balance sheet is that the United Kingdom is 'long' foreign currency assets and 'short' sterling assets.(2) So a fall in the exchange rate would, all things being equal, tend to *boost* the net external position. So if the exchange rate were to fall because of a portfolio shift away from UK assets, this is unlikely to be exacerbated by fears of increasing UK net external liabilities. This is also the case with an adverse terms of trade shock, which would be likely to lead to a mark-down of UK equities.

Furthermore, the United Kingdom does not, at present, have a problem servicing its net external liabilities (interest/profit/dividends are currently positive—see the box on pages 358–59 on rates of return). But the size of gross assets and liabilities does mean that small changes in portfolio choices can have large effects, speeding up financial account adjustments to any shocks.

The key to the financial stability implications of the UK external balance sheet lies in the banking sector. UK external short-term debt is large, but this reflects the specialisation in international banking activities. Ultimately, the financial stability risks posed by the banking sector depend on the health of the institutions themselves, on their risk management policies and practices, on market discipline, and on official prudential supervision.

(1) Bank liquidity management will be discussed in the December 2000 issue of the Bank's *Financial Stability Review*.
(2) In contrast, many emerging market crisis countries were 'short' foreign currency assets (ie they had net foreign currency liabilities) in the run-up to the 1997–98 crises.

Glossary

Balance of payments: A record of the transactions between the residents of a country and the rest of the world over a specified period of time.

Capital account: The account of capital transfers and acquisition/disposal of non-produced, non-financial assets (ie copyrights).

Current account: The record of transactions in respect of trade in goods and services, income and current transfers.

Direct investment: When residents of one country gain a lasting interest in the activities of a subsidiary or associated company in another country. (Defined in the 1993 *IMF Balance of Payments Manual*, fifth edition, as a stake of 10% or more of the equity capital.)

Financial account: The account of transactions in external assets and liabilities, including direct investment, portfolio investment, other investment and reserve assets.

International investment position: The record of end-period balance sheet levels of a country's external assets and liabilities.

Other investment: All investment other than that defined as portfolio or direct. The major components are deposits and loans.

Portfolio investment: Investment in equity and debt securities issued by overseas companies, other than that classed as direct investment, plus equity and debt issued by overseas governments. Debt securities includes bonds and notes, certificates of deposit, commercial paper and Treasury bills.

Sources:
IMF Balance of Payments Manual (5th edition)
Office for National Statistics, *The Pink Book* 2000