A FINANCIAL PERSPECTIVE ON THE UK CURRENT ACCOUNT DEFICIT

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A drop in net FDI investment income has been the primary factor in the recent deterioration in the measured UK current account balance, with the trade balance relatively stable. We argue that financial engineering (with little net impact on the underlying international investment position for the UK) may have contributed to the decline in net FDI investment income, such that the headline current account balance cannot be interpreted as a sufficient indicator of the state of the UK's external position. A more granular analysis of cross-border financial linkages than is possible with currently-published data would be required in order to provide a comprehensive assessment of external sustainability.

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I. Introduction

The UK has experienced an extraordinary deterioration in its current account balance in recent years. Compared to an average deficit of 2.1 per cent of GDP during the 2004–7 pre-crisis period, the average deficit only slightly shifted to an average of 2.7 per cent during 2008–11 but has expanded to 4.7 per cent during 2012–15.1 The scale of the current account deficit has been highlighted as a financial risk factor for the UK by the Bank of England in its recent *Financial Stability Report* publications.²

The goal of this article is to examine the mechanics of the current account deficit from a financial perspective. A theme in international macroeconomic research in recent years has been the re-interpretation of balance of payments analysis in view of the dramatic growth in cross-border financial positions (see, amongst many others, Lane and Milesi-Ferretti, 2007; Gourinchas and Rey, 2014; Advjiev *et al.*, 2015; Lane, 2015). In particular, an important lesson from this line of research is that the scale and composition of international balance sheets may influence the measurement of the current account balance, even in scenarios in which there has been no meaningful shift in underlying crossborder obligations. The structure of the rest of this article is as follows. In Section 2, I lay out some basic principles in relation to financial analysis of the balance of payments. I turn to the recent UK experience in Section III. Section IV concludes.

2. A financial perspective on the balance of payments

It is useful to consider the factors underlying the evolution of the net international investment position (*NIIP*) between periods

$$NIIP_t - NIIP_{t-1} = CAB_t + SFA_t$$

where *CAB* is the current account surplus and *SFA* is the stock-flow adjustment term. In this specification, it is assumed for simplicity that the capital account balance (a minor item in the UK balance of payments) and net errors and omissions are zero, so that there is a correspondence between the current account balance and the net acquisition of financial assets (that is, the financial account balance). A current account surplus is associated with the net acquisition of foreign assets and/

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or a net reduction in foreign liabilities, while a current account deficit is associated with net sales of foreign assets and/or net issuance of foreign liabilities.

In principle, the stock-flow adjustment term should reflect 'valuation effects' (net capital gains on holdings of foreign assets and foreign liabilities due to movements in the market values of assets and liabilities and exchange rates) but it also includes the impact of data revisions and other adjustments that are associated with jump shifts in stocks of foreign assets relative to foreign liabilities. That is, we can write

$$SFA_t = NETVAL_t + RESID_t$$

where *NETVAL* is the net valuation gain (capital gains on foreign assets minus capital gains on foreign liabilities) and *RESID* captures the residual impact of data revisions. For some countries (including the United States), official data releases provide information on the individual contributions of *NETVAL* and *RESID* (Lane and Milesi-Ferretti, 2009; Gohrband and Howell, 2015). However, this subdivision is not routinely published in the UK data releases.³

In turn, we can decompose the current account balance into two terms

$$CAB_t = TB_t^{GSTL} + NETINVINC_t$$

where *TBGSTL* is the broadly-defined trade balance (net exports of goods and services plus net transfers and net international labour income) and *NETINVINC* is net international investment income.

We can combine these expressions to write

$$\begin{split} NIIP_{t} - NIIP_{t-1} &= TB_{t}^{GSTL} + (NETINVINC_{t} \\ &+ NETVAL_{t}) + RESID_{t} \\ NIIP_{t} - NIIP_{t-1} &= TB_{t}^{GSTL} + NETFINRET_{t} + RESID_{t} \end{split}$$

where the net financial return on the international investment position *NETFINRET* is the sum of net investment income (*NETINVINC*) and net capital gains (*NETVAL*).

This set of equations highlights that a shift in the composition of financial returns between investment income and capital gains can alter the measurement of the current account, even if there is no impact on the dynamics of the net international investment position. The mix between investment income and capital gains depends on the structure of the international balance sheet. For instance, shares in early-stage firms may not yield much dividend income but offer the prospect of capital gains, while the opposite pattern may hold for mature cash-generating firms.

In addition, an important feature of balance of payments accounting is that investment income on foreign direct investment positions is recorded on an accruals basis, whereas investment income on portfolio positions is recorded on a payment basis. Accordingly, a decline in net foreign direct investment assets that is offset by a matching increase in net portfolio equity assets may have no impact on the net international investment position but can generate a temporary or permanent deterioration in the measured current account balance, since the profits on the direct investment position are no longer credited to the current account balance while the returns to portfolio equity holdings take the forms of capital gains and/or (possibly deferred) dividend income.

A shift between foreign direct investment and portfolio equity investment may be financially engineered by the tax planning activities of multinational corporations. To see this, suppose Firm X is fully owned by UK investors and originally headquartered in the UK with domestic assets of 100, foreign assets of 100 and zero foreign liabilities. The foreign assets of this firm add 100 to the UK's FDI asset position and the net international investment position.

Now suppose Firm X chooses to shift its headquarters to a foreign location for tax reasons. The UK FDI asset position declines by 100, the UK FDI liability position increases by 100 (the UK-located assets of the firm now constitute FDI liabilities for the UK) and the UK portfolio equity asset position increases by 200 (UK owners of the firm now have foreign portfolio equity claims on the foreign-headquartered firm). While there is no change in the UK's net international investment position, the UK current account balance will tend to deteriorate due to the loss of inward FDI investment income flows (net of dividend payments on the portfolio equity assets) and the increase in outward FDI investment income flows (the UK-located earnings of the firm are recorded as an outflow to the foreign headquarters).

In terms of the overall dynamics of the net international investment position, this should be counterbalanced through capital gains on the foreign portfolio equity assets (if earnings are retained by the foreign headquarters, this should be reflected in the market value of the firm). So, the overall financial implications for the UK may be neutral, even if there is a measured decline in the current account balance.

The impact of multinational firms on balance of payments accounting is drawing increasing attention. Policy officials in countries such as Switzerland that are the home to the headquarters of global corporations are concerned that measured current account surpluses are flattered by high FDI investment income inflows (that ultimately accrue in proportion through capital gains and dividend payments to foreign portfolio equity investors in these global firms).⁴

As laid out in the stylised example above, a recent phenomenon has been the relocation of a firm's headquarters for tax planning reasons. For instance, Fitzgerald (2013) and Central Statistics Office (2015) highlight that this has had a substantial impact on the Irish balance of payments, with the foreign earnings of re-domiciled firms now contributing to the Irish current account surplus (even if these firms have zero Irish ownership and zero Irish activities), despite the fact that the gains ultimately accrue to the foreign portfolio equity owners of these firms. Although the identities of re-domiciled firms are not revealed in the balance of payments data, it is not implausible that some of these firms may have relocated from the UK.

Having laid out some of the conceptual issues, we turn to the analysis of the recent UK experience in Section 3.

3. The UK experience

Figure 1 shows the broadly-defined trade balance (TB^{GSTL}) and net international investment income (NETINVINC) over 2007–14. The plot indicates that the trade balance has been broadly stable over this period, whereas there has been a substantial decline in net investment income since 2011.

Unfortunately, the decline in net investment income since 2011 has not been offset by positive stock-flow adjustments. Figure 2 shows that the cumulative deterioration in the net international investment position since 2010 has exceeded the cumulative current account deficit. This is in contrast to the pattern during the global financial crisis when the UK experienced a remarkable improvement in its net international investment position, despite its current account deficit.⁵

A remarkable development during this period has been the shift in the status of the UK in relation to its net FDI position. Figure 3 shows that the UK has moved from a large net positive FDI position in 2010 to a negative FDI



Figure 1. The trade balance and net international investment income (£ millions)

Source: Author's calculations based on data from the Office of National Statistics.

Figure 2. Net international investment position, 2010–14



Source: Author's calculations based on data from the Office of National Statistics.

Notes: Net international investment position is expressed as percentage of GDP. Net international investment position (cumulative flows) shows the alternative path for the net international investment position if the stock-flow adjustment term were zero during 2011–14.

position in 2014, as a result of a minor decline in FDI assets and a large-scale increase in FDI liabilities.⁶



Source: Author's calculations based on data from the Office of National Statistics.

The shifts in FDI positions between 2010 and 2014 can be attributed to cumulative financial flows and stockflow adjustments (reflecting a mix of capital gains and data revisions):

$$FDIA_{2014}^{STK} - FDIA_{2010}^{STK} = \sum_{s=2011}^{s=2014} (FDIA_{s}^{FLOW} + FDIA_{s}^{SFA})$$
$$FDIL_{2014}^{STK} - FDIL_{2010}^{STK} = \sum_{s=2011}^{s=2014} (FDIL_{s}^{FLOW} + FDIL_{s}^{SFA})$$

Table 1 shows a remarkable contribution from the stockflow adjustment term for the stock of FDI liabilities, accounting for £336 billion of the total £434 billion increase in the position (77 per cent of the increase). In relation to FDI assets, there was a net disposal of FDI assets during this period, while the stock-flow adjustment term was also negative, such that both components contributed to the decline in the gross stock of FDI assets.

While the large stock-flow adjustment contribution for FDI liabilities might in part relate to an improvement in the value of FDI positions in the UK (for instance, through an increase in retained earnings and/or a revaluation of the assets held by the FDI entity in the UK), it is also consistent with a discrete increase in the stock of FDI liabilities that is not adequately tracked in the financial flow data. For instance, the UK assets of a firm that

Table I. Evolution of FDI positions 2010–14 (£ billions)

	FDIA	FDIL	
2010	1271.7	941.1	
SUMFLOW	-14.8	97.9	
SFA	-29.9	336.0	
2014	1227.0	1375.0	

Source: Author's calculations based on data from the Office of National Statistics.

Table 2. Shifts in the co	omposition of the	net international
investment position 20	10-14 (£ billions)	

Net FDI	-478.6
Net portfolio equity	145.1
Net portfolio debt	167.4
Net other debt	-133.6
Net derivatives	-45.7
Reserve assets	18.0
Fotal	-327.3

Source: Author's calculations based on data from the Office of National Statistics.

switches its headquarters to a foreign country would be re-classified as FDI liabilities. Such reclassifications may be recorded in the stock-flow adjustment term.

Figure 4 provides a decomposition of net international investment income over 2011–14 between net FDI income, net portfolio investment income and net other investment income (mostly relating to income on cross-border bank deposits and loans).⁷ It shows that the overall decline in net international investment income is mainly driven by a large drop in net FDI income, which fell from £53.5 billion in 2011 to just £2 billion in 2014.8

In part, the drop in net FDI income reflects the turnaround in the net FDI position shown in tables 1 and 2: all else equal, a lower stock of FDI assets and a higher stock of FDI liabilities should be associated with a deterioration in net FDI income.

However, an additional contributory factor has been the decline in the average yield on FDI assets relative to FDI liabilities. Table 3 shows that the average yield on FDI assets has plunged from 8.1 per cent in 2011 to 5.8 per cent in 2014, whereas the average yield on FDI liabilities has marginally increased from 5.3 per cent to 5.5 per cent. While yields on FDI may be expected to vary with the sectoral and geographical composition of the underlying FDI positions, a decline in the average yield on FDI assets and an increase in the average yield

Figure 3. Stocks of FDI assets and liabilities (£ millions)



Source: Author's calculations based on data from the Office of National Statistics.

Table 3.	Yields	on foreign	direct i	nvestment	positions
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	2011	2014	
FDIA FDII	8.1 5 3	5.8 5.5	
	5.5	5.5	

Source: Author's calculations based on data from the Office of National Statistics.

Note: The yield is calculated by dividing investment income in year t by the average of the stock position in years t-1 and t.

on FDI liabilities is also consistent with some highlyprofitable firms switching headquarters to a foreign country (reducing FDI income inflows and raising FDI income outflows). Further examination of the sources of yield differentials is warranted.⁹

4. Conclusions

In summary, it has been shown that the sharp decline in net FDI income since 2011 can be attributed to a combination of a reversal in the underlying net FDI position and a reduction in the income yield differential between FDI assets and FDI liabilities. These patterns, together with the important role of 'other changes' in accounting for the rapid expansion in FDI liabilities plus the improvement in the net portfolio equity position, hint that financial engineering may have played some role in the deterioration in the measured current account balance. To the extent that such financial engineering activities have no impact on the true net international investment position, any concerns about the sustainability of the external position are attenuated.

More broadly, the recent UK experience provides just one more illustration of the challenges posed by the financial operations of multinational corporations in the interpretation of balance of payments data in an era of financial globalisation (Avdjiev *et al.*, 2015; Lane, 2015). Substantial investments by national and international agencies in the gathering and analysis of more granular financial data are required if cross-border financial transactions and linkages are to be understood with any degree of accuracy.

NOTES

- I These data (including the 2015 forecast) are drawn from the October 2015 IMF World Economic Outlook dataset.
- 2 The UK current account balance has also received attention from monetary policy officials at various times: see Nickell (2006), Weale (2013) and Broadbent (2014).
- 3 There are periodic attempts to provide a rough calculation of the relative contributions of valuation effects and other changes – see, for instance, Whittard (2012). However, the decomposition is not reported on a regular or timely basis.
- 4 See Mancini-Griffoli and Stoffels (2012). A second distortion is that the manipulation of intra-firm transfer prices may affect the measured trade balance and measured net international investment income. However, transfer pricing should not affect the current account balance, since accounting-driven reductions in net exports are one-for-one offset by matching increases in net investment income (and vice versa).
- 5 On the role of Sterling depreciation in generating net capital gains during the global crisis, see Whittard (2012) and Benetrix et al. (2015).
- 6 As pointed out by Bank of England (2014) and Broadbent (2014), the market value of FDI positions may exceed book value. While this provides comfort in the context of a positive net FDI position, the shift into negative territory in 2014 means that the comparison of market values and book values for FDI positions may no longer provide the same degree of reassurance.
- 7 For simplicity, we omit the minor contribution of investment income on the UK's holdings of official foreign reserves.
- 8 This pattern is still holding: net FDI investment income in the first half of 2015 is proportionate to the 2014 value.
- 9 Once the 2015 UK Pink Book is published, some further insights into the shift in yields may be obtained by examining the sectoral and geographical composition of the FDI data.

REFERENCES

- Avdjiev, S., McCauley, R.N. and Shin, H.S. (2015), 'Breaking free of the triple coincidence in international finance', mimeo, Bank for International Settlements.
- Bank of England (2014), 'The UK current account', Inflation Report, May, pp. 22–3.
- Benetrix, A.S., Lane, P.R. and Shambaugh, J.C. (2015), 'International currency exposures, valuation effects and the global financial crisis', *Journal of International Economics*, 96, S98–S109.

Figure 4. Net investment income by category (£ millions)

- F72 NATIONAL INSTITUTE ECONOMIC REVIEW No. 234 NOVEMBER 2015
- Broadbent, B. (2014), 'The UK current account', speech given on 29 July, Bank of England.
- Central Statistics Office (2015), Redomiciled PLCs in the Irish Balance of Payments.
- Fitzgerald, J. (2013), 'The effect of re-domiciled Plcs on Irish output measures and the balance of payments', ESRI QEC Research Note No. 2013/1/2.
- Gohrband, C.A. and Howell, K.L. (2015), 'U.S. international financial flows and the U.S. net investment position: new perspectives arising from new international standards', in Hulten, C. and Reinsdorf, M. (eds), *Measuring Wealth and Financial Intermediation* and Their Links to the Real Economy, University of Chicago Press, pp, 231–7.
- Gourinchas, P.-O. and Rey, H. (2014), 'External adjustment, global imbalances and valuation effects', in Helpman, E., Rogoff, K. and Gopinath, G. (eds), *Handbook of International Economics, Vol. 4*, Amsterdam, Elsevier, pp. 585–645.

Lane, P.R. (2015), 'Cross-border financial linkages: identifying and

measuring vulnerabilities', CEPR Policy Insight No. 77.

- Lane, P.R. and Milesi-Ferretti, G.M. (2007), 'The external wealth of nations Mark II: revised and extended estimates of foreign assets and liabilities: 1970–2004', *Journal of International Economics*, 73, pp. 223–50.
- —(2009), 'Where did all the borrowing go? A forensic analysis of the U.S. external position', *Journal of the Japanese and International Economies*, 23 (2), pp. 177–99.
- Mancini-Griffoli, T. and Stoffels, N. (2012), 'Adjusting the current account to better capture wealth accumulation', mimeo, Swiss National Bank.
- Nickell, S. (2006), 'The UK current account deficit and all that', speech given on 25 April, Bank of England.
- Weale, M.R. (2013), 'The balance of payments', speech given on 16 February, Bank of England.
- Whittard, D. (2012), The UK's External Balance Sheet The International Investment Position (IIP), Report, Office for National Statistics.