



**CONFERENCE ON STRENGTHENING SECTORAL POSITION AND
FLOW DATA IN THE MACROECONOMIC ACCOUNTS**

Jointly organized by the IMF and OECD

February 28–March 2, 2011

IMF Headquarters 2 (HQ2)
Conference Hall 1 & 2 (lobby level)
1900 Pennsylvania Ave NW, Washington, DC, 20431

International Banking Statistics and Links to Sectoral Balance Sheets

To be presented in Session 3, Item 5 by Karsten Von Kleist, Bank for International
Settlements

The views expressed in this presentation and web links to presentations that will be considered at the Conference "*Strengthening Sectoral Position and Flow Data in the Macroeconomic Accounts*" are those of the authors only, and the presence of them, or of links to them, on the IMF website does not imply that the IMF, its Executive Board, or its management endorses or shares the views expressed in the presentations.



International banking statistics and links to sectoral balance sheets

Paul Van den Bergh & Karsten Von Kleist

Conference on Strengthening sectoral positions and flow data in the macroeconomic accounts (session 3.5)

Washington DC, 2 March 2011



1. Introduction

- BIS work on banking sector data. How do banking statistics fit with sectoral accounts?
- In the SNA, the whole of the rest of the world is treated only as a single sector.
- Is a from-whom-to-whom framework feasible within the SNA framework?



2. The BIS locational banking statistics by residence

- Coverage of data in terms of SNA sectors (depository corporations)
- Characteristics of data (instruments, currency breakdown)
- Counterparty information (countries and sectors)



An example using US data

- Like most of the U.S. economic accounts produced by the Bureau of Economic Analysis (BEA), the estimates of financial-account transactions in the international transactions accounts (ITAs) are based largely on source data collected by other federal government agencies—in this case, by the Treasury International Capital (TIC) reporting system of the U.S. Department of the Treasury.
- The relationships between the estimates in the ITAs that are prepared by BEA and the data from the TIC reporting system are shown in Table 3 which presents the estimates of claims on, and liabilities to, foreigners reported by U.S. banks.
- http://www.bea.gov/scb/pdf/2009/07%20July/0709_treasury.pdf



Table 3. Relation of Claims on and Liabilities to Foreigners Reported by U.S. Banks and Securities Brokers in the International Transactions Accounts (ITAs) to Treasury International Capital (TIC) Reporting System Data

[Millions of dollars]

Line		2006 ^r	2007 ^r	2008 ^p
	Claims (Credits +; decrease in U.S. assets. Debits -; increase in U.S. assets.)			
A1	Total claims outstanding, beginning of year, TIC	2,500,399	3,140,590	3,792,775
2	Total claims outstanding, end of year, TIC	3,140,590	3,792,775	3,394,342
3	Change in claims, TIC (A1 – A2)	-640,191	-652,185	398,433
4	Minus: Valuation adjustments including unrealized exchange-rate gain or loss and other adjustments ¹	-151,767	-16,977	-26,033
5	Minus: Direct investment	15,904	3,458	-11,773
6	Plus: Coverage adjustments including commercial paper and other adjustments ²	2,229	-5,427	-2,860
7	Equals: Claims on foreigners reported by U.S. banks, not included elsewhere, ITAs (A3 – A4 – A5 + A6) (table 1, line 54)	-502,099	-644,093	433,379
	Liabilities (Credits +; increase in U.S. liabilities. Debits -; decrease in U.S. liabilities.)			
B1	Total liabilities outstanding, beginning of year, TIC	3,186,745	4,010,427	4,706,310
2	Total liabilities outstanding, end of year, TIC	4,010,427	4,706,310	4,615,010
3	Change in liabilities, TIC (B2 – B1)	823,682	695,883	-91,300
4	Minus: Valuation adjustments including unrealized exchange-rate gain or loss and other adjustments	347,781	34,332	-36,650
5	Minus: Direct investment	2,890	-6,123	-30,634
6	Plus: Coverage adjustments including short-term U.S. Treasury obligations and other adjustments ³	11,397	-49,367	-456,016
7	Equals: Liabilities to foreigners reported by U.S. banks, not included elsewhere, ITAs (B3 – B4 – B5 + B6) (table 1, lines 61 + 69)	484,408	618,307	-480,032
8	Liabilities to foreign official agencies (table 1, line 61)	22,365	109,019	-153,443
9	Liabilities to other foreigners (table 1, line 69)	462,043	509,288	-326,589

p Preliminary

r Revised

1. Includes adjustments for claims on foreigners written off by U.S. reporters.

2. Includes adjustments for supplemental transactions in foreign commercial paper and other instruments.

3. Includes adjustments for transactions that are included in other international transactions accounts, including transactions in short-term U.S. Treasury obligations and in other liabilities held in custody by U.S. reporters.



From TIC to Flow of Funds

- The TIC data are indirectly the basis of the **Federal Reserve Board's Flow of Funds** accounts for financial positions and flows of the Rest of the World sector.
- The Flow of Funds accounts use as their primary input the data as published by BEA in its international transactions accounts, which are based on the TIC data. The Flow of Funds Accounts are available from the Federal Reserve Board of Governors' website at this link:
- <http://www.federalreserve.gov/releases/Z1/>



<http://www.treasury.gov/resource-center/data-chart-center/tic/Pages/index.aspx>

U.S. DEPARTMENT OF THE TREASURY

[En Español](#) | [Press Center](#) | [Blog](#)



Search



[Advanced Search](#)

[Home](#)

[Treasury For...](#)

[About](#)

[Resource Center](#)



[Services](#)

[Initiatives](#)

[Careers](#)

[Connect with Us](#)

[Economic Policy](#)

[Financial Education and Financial Access](#)

[Financial Markets, Financial Institutions, and Fiscal Service](#)

[Financial Sanctions](#)

[International](#)

[Small Business Programs](#)

[Tax Policy](#)

[Terrorism and Illicit Finance](#)

[Data and Charts Center](#)

[Agency MBS Purchase Program](#)

[Interest Rate Statistics](#)

[Investor Class Auction Allotments](#)

Resource Center

[Home](#) » [Resource Center](#) » [Data and Charts Center](#) » [Treasury International Capital System \(TIC\)](#)

Treasury International Capital System (TIC) - Home Page

1. Securities data:
 - a. U.S. Transactions in long-term securities: (monthly data; covers U.S. and foreign securities).
 - b. Special monthly data on U.S. securities: Table on Major Foreign Holders of Treasuries (mfh), Press release historical data, ABS repayments, Net purchases by sector, Other acquisitions); data on Foreign securities.
 - c. Holdings of U.S. securities; Holdings of Foreign securities (annual data, long-term & short-term securities).
 - d. Holdings (monthly) of short-term U.S. securities; Holdings of short-term foreign securities.
2. Banking Data - monthly Liabilities to, and Claims on, foreign-residents. (includes short-term securities.)
3. Derivatives Contracts - quarterly Holdings and Net Cash Settlements with foreign-residents.

HELP FOR TIC DATA USERS

- [Release Dates](#)
- [FAQs About TIC](#)
- [News](#)
- [Country Codes by Code and Region](#)
- [Using TIC](#)
- [Contact TIC](#)
- [Press Release of TIC Monthly data](#)

TIC NAVIGATION

- TIC Navigation among web pages
- [TIC Home Page](#)
 - [TIC Press Releases and Archives](#)
 - [Securities \(a\) Transaction in Long Term Securities](#)
 - [Securities \(b\) Special Data Series](#)
 - [Securities \(c\) Cross-Border Portfolio Holdings](#)
 - [U.S. Banking Liabilities to Foreigners](#)
 - [U.S. Banking Claims on Foreigners](#)
 - [U.S. Nonbanking Claims and Liabilities](#)





From whom to whom example: Deposits from non-banks in Uruguay to US banks

Resource Center



Home » Resource Center » Data and Charts Center » Treasury International Capital System (TIC) » U.S. Banking Claims on Foreigners

U.S. Banking Claims on Foreigners

6/7/2010

STATISTICS

- Claims on all foreigners by type and counterparty
Note: Short-term foreign securities held by U.S. residents are included (see News #2(a) below):
 - [Recent data](#) Also available in "[csv](#)" format.
 - [Historical data](#) Also available in "[csv](#)" format.
- [By Country](#)
- [Grand Total](#) Also, data [before February 2003](#)
- [Global \(set of all countries\)](#). Also available in "[csv](#)" and "[txt \(tab-delimited\)](#)" formats to download for spreadsheets. The list of country codes-country names is in "Resources" in the upper-right section of the webpage. Also, data [before February 2003](#) (2,090 KB); in "[csv](#)" and "[txt](#)" (tab-delimited)" formats.
- [Europe & Canada](#). Also, data [before February 2003](#).
- [Latin America & Caribbean](#). Also, data [before February 2003](#).
- [Asia](#). Also, data [before February 2003](#).
- [Africa, International Organizations, & Others](#). Also, data [before February 2003](#).



Transition TIC (Treasury International Capital Reporting System) report on Uruguay to BIS data:

- Non-negotiable deposits held by all other foreigners [col 6] +
- Selected other liabilities held by all other foreigners [col 13] +
- Est. fraction of "total liabilities in foreign currencies" [col14] +
- Est. fraction of "custody liabilities [col4] =
- US banks' deposit liabilities to non-banks resident in Uruguay
- That is: excluding foreign official institutions and foreign banks, this results in an effective bank/non-bank sectoral split

- Usually one or a few columns of published TIC data make up the vast majority of a BIS cell, with small remaining discrepancies.
- Larger discrepancies can happen temporarily (eg 2009, next slide) because of lags in transmitting historical revisions to BIS data
- BIS data contain adjustments, such as series breaks, that could cause further discrepancies between BIS and published TIC data for certain quarters.



TIC US banks' deposit liabilities to non-banks resident in Uruguay are thus reported in the BIS statistics
Larger discrepancies are due to pending revisions

Quarter.Year-	Amounts out.		TIC		BIS vs TIC	
	Liabilities to all sectors	Liabilities to non-banks	Total	non-banks	Diff_Total	Diff_Nonbanks
2010-Q1	7,766	4,433	7,769	4,436	3	3
2009-Q4	6,772	3,764	6,782	3,772	10	8
2009-Q3	4,888	2,356	5,722	3,183	834	827
2009-Q2	5,357	2,541	6,948	4,126	1,591	1,585
2009-Q1	5,826	2,682	6,717	3,573	891	891
2008-Q4	5,966	2,642	6,035	2,711	69	69
2008-Q3	4,439	2,243	4,453	2,254	14	11
2008-Q2	4,669	2,261	4,699	2,290	30	29
2008-Q1	5,613	2,445	5,614	2,443	1	-2
2007-Q4	5,471	2,141	5,475	2,144	4	3
2007-Q3	6,021	1,748	6,026	1,753	5	5
2007-Q2	5,400	1,996	5,402	1,997	2	1
2007-Q1	5,966	2,298	5,966	2,298	0	0
2006-Q4	4,626	1,798	4,626	1,798	0	0
2006-Q3	4,732	1,951	4,737	1,951	5	0
2006-Q2	4,859	2,125	4,867	2,127	8	2
2006-Q1	4,750	2,071	4,762	2,067	12	-4



Conclusion

- Since the **Federal Reserve Board's Flow of Funds**, accounting for US financial positions and flows with the Rest of the World sector, the balance of payments and the international banking statistics all derive from the same data collection ...
- ... in principle, the sectoral breakdown (who-to-whom) available in the latter data set should also be feasible in the Flow of Funds.
- But there may be practical problems:
 - Consistency of building blocks (valuations, accrual of interest)
 - Correct sectoral classification of counterparties in foreign countries
 - Holders of securities
- How are some of these problems handled in BIS international banking statistics?

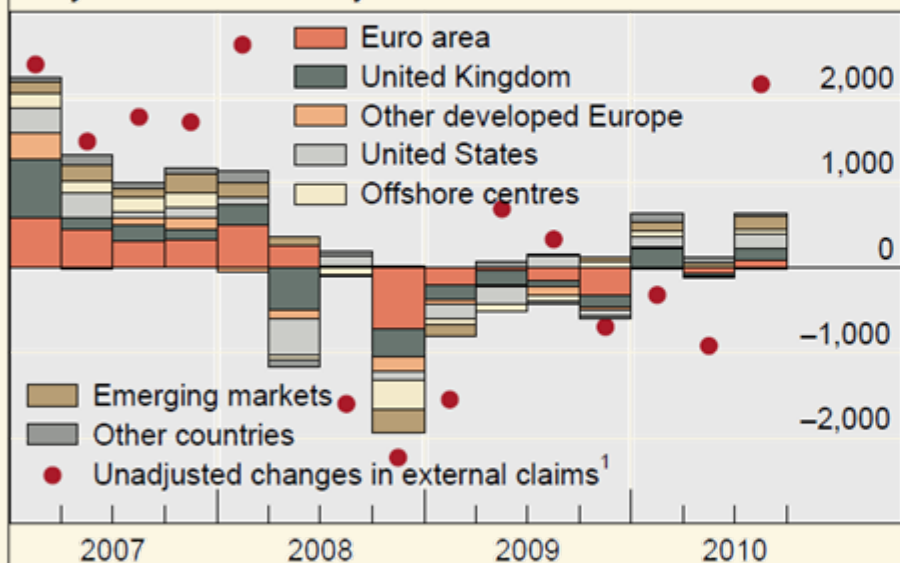


Limiting inconsistencies 1: Currency valuation adjustments

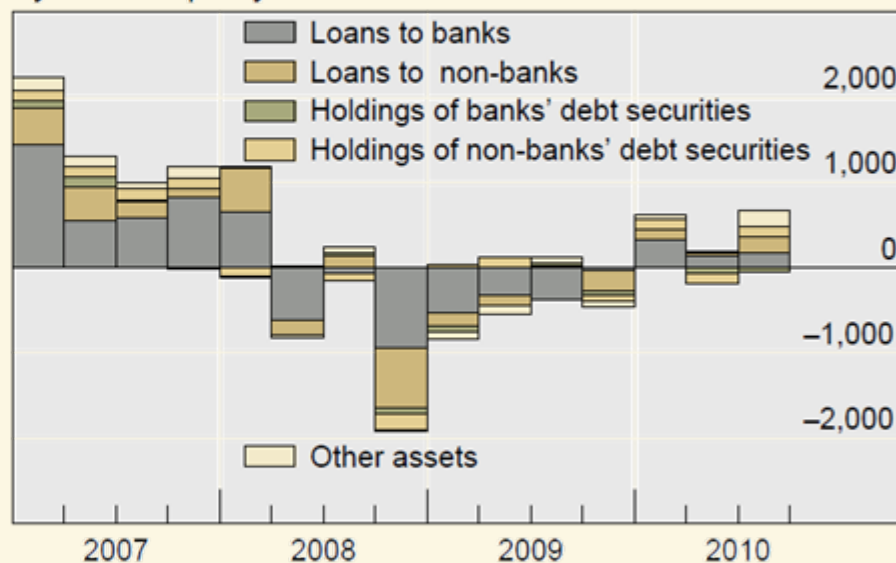
External assets of BIS reporting banks

Exchange rate adjusted changes in stocks, in billions of US dollars

By vis-à-vis country



By counterparty and instrument



¹ Before correcting for breaks in series and exchange rate effects on outstanding balances denominated in currencies other than the US dollar.

Source: Locational banking statistics by residence.

Graph 1



Limiting inconsistencies 2: valuations, classifications

- Every sector, country, instrument position is reported with a full currency breakdown to adjust for exchange rate movements (more important for changes than for stocks)
- Loans still mostly valued at nominal value, so no counterparty consistency problem
- Valuation at market prices (mark to model etc) introduces counterparty inconsistencies for securities
- Annual global exchange of interbank consistency tables, based on the principle that the interbank liabilities of banks in country A should be the interbank assets of country B
- Annual global exchange of bank lists to ensure correct geographical and sectoral classification of banks



Limiting inconsistencies 3: Fixed sectors

- The domestic flows of funds will designate certain crucial sectors as fixed sectors (eg the government sector and the banking sector) to ensure consistency with important concepts such as government debt and domestic credits.
- Other sectors will be adapted to fit with the central fixed sectors.
- Similarly, in BIS statistics, the bank sector is fixed, while the non-bank sector adapts.

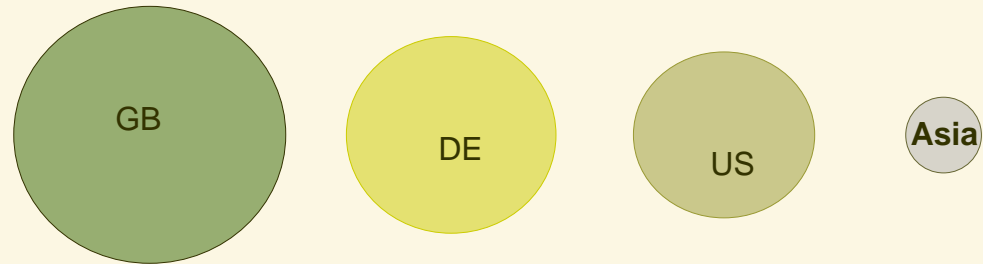
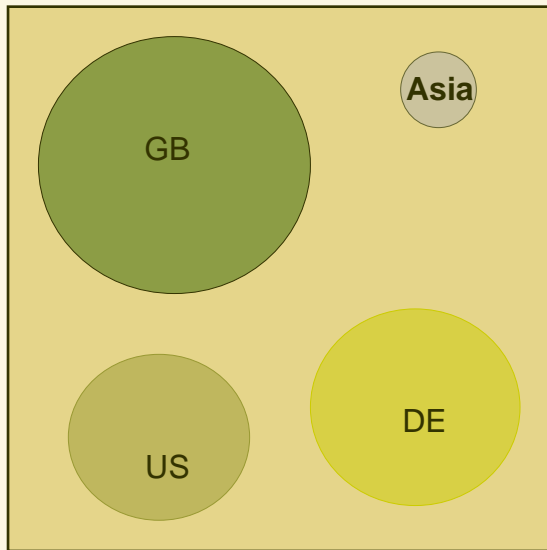


Limiting inconsistencies 4: Correct sectoral classification of counterparties

- Use counterparty data if more granular
- BIS data are used in many countries to estimate more comprehensively non-banks' bank deposits abroad, because banks' reporting of their liabilities to foreign nonbanks are more reliable.
- IMF CPIS counterparty data can be rearranged to identify holders of securities. Since collecting data on resident entities is always easier and more reliable than collecting data on non-resident entities, compilers could utilise the data of other countries.
- BIS uses data from a security-by-security database to fill some data gaps for analytical work
- BIS example of using counterparty data explained:



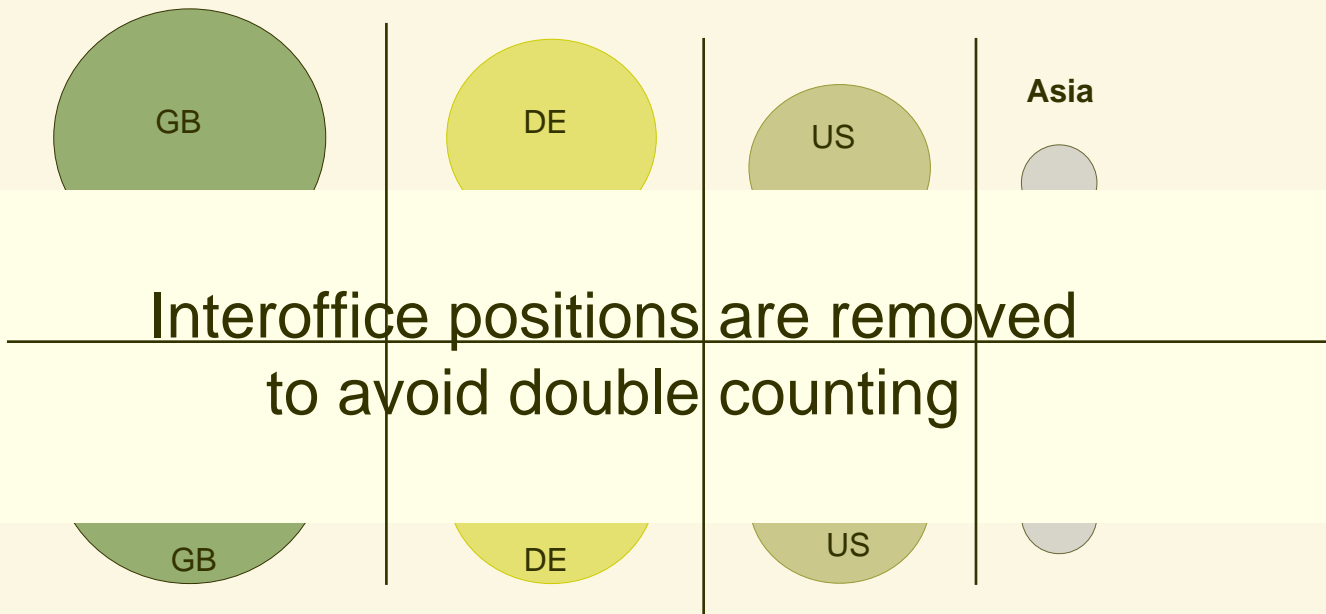
From BIS locational by *residence* to BIS locational by *nationality* data



Banks resident in the UK
are split up by the
nationality of their head
office

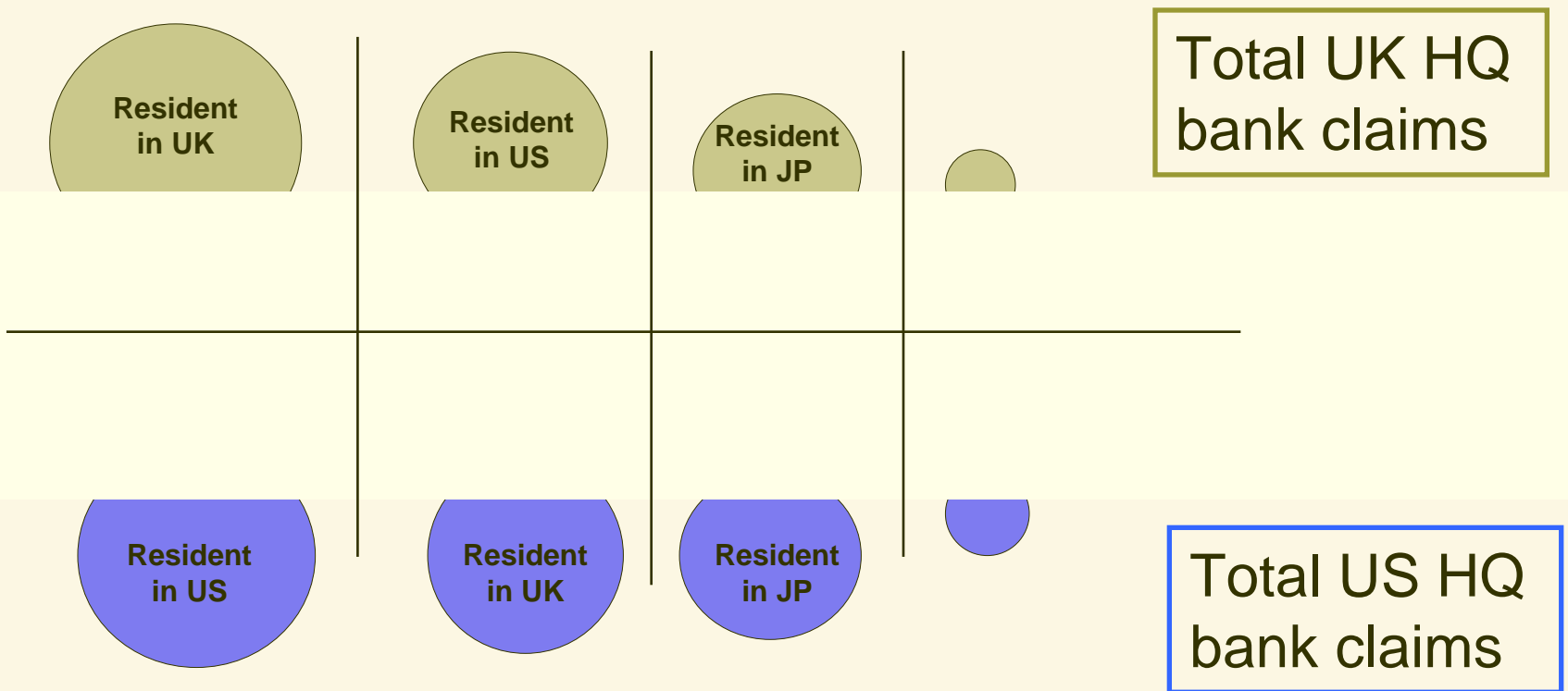


Cross-border positions with other bank offices (which share the same head office) are reported separately and subtracted





Example: UK headquartered and US headquartered bank positions are reported by all countries to BIS for aggregation





Application to flow of funds

- Perhaps the Rest of World sector of each country could be broken down by counterparty residence country, by sector, etc.
- Then rearranged data as in the BIS example above could provide each country with good Rest of World (by country) building blocks.
- But this approach needs a central institution (such as the BIS in the example) to keep track of all the data bits and pieces.



3. Future statistical plans fit with emerging policy needs

- More detailed counterparty information on banks' positions seems feasible (non-bank financials also introduced in BOP/IIP reporting)
- More granular locational data by nationality reporting to highlight potential frictions in global capital flows