European Banks' Country-by-Country Reporting

A review of CRD IV data

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Revised

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For the Greens/EFA MEPs in the European Parliament

1. Summary

This report[i] is based on the country-by-country reporting of 26 European Union based banks, 17 of which had published the full data now required of banks by the time the report was prepared and nine of whom had still only published the partial data permitted in 2014.

The country-by-country reporting from these banks was used to test the hypothesis that some or all of these banks may have been systematically over-reporting their profits in low tax jurisdictions or places identifiable as tax havens whilst under-reporting them in those places where they are either based or have major centres of operation.

The report suggests that thus hypothesis has been found to be true: overstatement of profits in identifiable low tax and offshore jurisdictions appears to be occurring based on the data published by the banks surveyed.

The report addresses the issue of profit relocation in two ways. Firstly, using the principles of unitary tax reporting, which would apportion profits to states where they could be taxed at local rates (a system akin to the European Union's Common Consolidated Corporate Tax Base) based on evidence of real economic activity taking place in that jurisdiction as represented by turnover and people employed it was estimated for the seventeen banks that reported full data, using their data in aggregate total, that it was likely that there was systemic reallocation of profits, or base erosion and profits shifting as the Organisation for Economic Cooperation and Development describe it.

This result was very clear: as section 11 of this report makes clear a review of 131 jurisdictions shows potential reallocation of profits exceeding €100 million into or out of the following jurisdictions:

Country	Profit based on combined turnover and people weighting	Declared profit	Difference weighted and actual profit
USA	2,718	5,592	-2,874
Belgium	1,068	3,855	-2,787
Luxembourg	485	2,743	-2,258
Ireland	162	1,832	-1,670
Singapore	603	1,745	-1,142
Mexico	1,532	2,563	-1,031
France	8,468	9,276	-808
Hong Kong	1,325	1,797	-472
Australia	197	664	-467
UAE	209	658	-449
Jersey	72	488	-416
Peru	128	509	-381
Czech Republic	351	693	-342
Japan	126	403	-276
Colombia	132	398	-266
China	605	870	-265
Venezuela	134	396	-262
Mauritius	40	277	-237
Argentina	363	564	-201
Turkey	429	579	-150
New Zealand	16	159	-143
Bangladesh	33	166	-133
Isle of Man	25	152	-127
South Africa	549	671	-122
Kenya	78	192	-114
Romania	183	75	108
Chile	403	249	154
Hungary	93	-70	163
Russia	419	233	186
Portugal	233	36	197
Ukraine	123	-76	199
South Korea	174	-590	764
Germany	6,832	5,728	1,104
Brazil	1,727	392	1,335
Unallocated	701	-785	1,486
Netherlands	2,024	199	1,825
Switzerland	258	-2,716	2,974
UK	7,642	4,342	3,300
Spain	3,483	-874	4,357

Data in red in the right hand column indicates over-reporting in the jurisdiction whilst data in black indicates under-reporting.

There can be no doubt that some of the reported differences are due to underlying economic circumstances. The Swiss data is, for example, distorted by a €2.9 billion loss reported by BNP Paribas in that country. UK data is also likely to be distorted by head office functions recording losses as a result of fines for financial misdemeanours charged on many UK banks. The Spanish economy has also, undoubtedly, had a difficult time.

The lesson from the Netherlands and maybe the UK and Germany is, however, that it does not appear to pay, at least in terms of reported profit and so likely potential tax yield, to host bank headquarters. This does not, however, appear to be true of France, which appears to enjoy over-reporting of profit. It is also not true of the USA, which appears to have exceptionally high profit reporting: why is not readily apparent although some banks e.g. BNP Paribas suggest that income from the Cayman Islands is reported by them in the USA.

It is notable (but not shown here) that there is exceptionally low reporting of income and profits in many of the expected tax havens such as Bermuda, Cayman and the British Virgin Islands. This is also true of Guernsey, although it seems likely that many banks include data for this island in their reporting for Jersey.

What is, perhaps, unsurprising is that there appears to be above expected reporting in many jurisdictions where this might have been anticipated including Belgium, Luxembourg, Ireland, Singapore, Hong Kong, UAE, Jersey, Mauritius and the Isle of Man, all of which have a reputation for acting as offshore tax locations for various reasons. Prima facie evidence of the relocation of profits to locations where that might be expected to provide a tax benefit does, therefore, appear to exist based on this data.

Secondly, assessment of the reporting of individual banks was undertaken. Because analysis of country-by-country reporting data is a new field of accounting research four possible methods of assessing potential profit shifting within individual banks were used in this survey with the results then being combined to provide an overall ranking. These methods were:

a. To consider the amount of potential reallocation of profit within the financial statements of each bank surveyed based on the unitary taxation methodology noted above;
b. To determine the individual jurisdiction in which the bank recorded its highest income per employee and the ratio of difference between that level of income and that for the bank as a whole as a measure of the aberrance of activity in that highest earning jurisdiction;
c. A similar measure to that described in (b) except for profit per employee;
d. A method combining three measures of overall ratio differences in distribution of implied, profit, tax paid and turnover allocation within banks to identify the degree of diversity of behaviour in the surveyed banks.

Each of these rankings was then combined to produce an overall ranking for the surveyed banks, with a rating of 1 indicating the highest risk of base erosion and profits shifting taking place, although, it is stressed, not proving that it does:

	Unitary reallocation of profits ranking	Maximum turnover per employee ranking	Maximum profit per employee ranking	Weighted ratios ranking	Combined and weighted score	Overall ranking
Royal Bank of Scotland plc	3	4	4	3	3.5	1
Deutschebank	8	2	1	4	3.8	2
Rabobank Group	7	5	3	1	4.0	3
Standard Chartered plc	1	3	6	6	4.0	4
Barclays plc	10	1	2	7	5.0	5
Banco Bilbao Vizcaya Argentaria, S.A	5	7	5	5	5.5	6
BNP Paribas	4	19	7	2	8.0	7
KBC Bank	9	8	8	10	8.8	8
ING	2	17	12	8	9.8	9
Credit Agricole	11	10	10	15	11.5	10
DZ Bank AG		12	14	20	11.5	11
BPCE SA	12	9	9	17	11.8	12
Commerzbank AG	6	20	13	9	12.0	13
Société Général		13		13	13.0	14
Santander		14		14	14.0	15
ABN AMRO	13	15	11	19	14.5	16
Caixabank SA		6		24	15.0	17
NIBC Bank NV	15	25	16	11	16.8	18
HSBC Holdings plc		22		12	17.0	19
Dekabank	14	24	17	16	17.8	20
Banque Fédérative du Crédit Mutuel		11		25	18.0	21
Lloyds Banking Group plc		16		23	19.5	22
Bankia SA	16	26	15	22	19.8	23
LBBW Landesbank Baden-Württemberg		21		21	21.0	24
KfW		23		26	24.5	25
Helaba Landesbank Hessen-Thüringer	17	18		18	26.5	26

Broadly speaking the four measures moved in line with each other with none at this stage, and with this limited amount of data, proving to be conclusively the most useful. Equally, it is clear that reliance on one alone may be insufficient: Royal Bank of Scotland may come top overall but does not in any individual ranking.

Broadly speaking larger banks appear more likely to be profit shifting. As the detailed findings for each method show, the disparity in behaviour is very wide, some banks appearing to have considerably more risk inherent in them than others.

Some European Union jurisdictions emerged as very clear potential destinations for the relocation of profits in these surveys in ways not apparent from the country data. In particular Ireland seemed a particularly likely destination whilst Malta also stood out. Some other destinations, such as Finland, were harder to explain.

What is clear, based on this survey, is that:

- Country-by-country reporting data is useful, and powerful;
- Country-by-country reporting data can be interpreted in ways predicted to be useful before any data was available for analysis, and the results generated generally support anticipated outcomes;
- The risk that profit shifting is taking place is real;

- The risk that some countries are seriously losing out in terms of revenue and profit reporting as a result appears to be high. This is particularly true of states that host bank head office locations, France excepted;
- Some EU countries appear to be gaining from tax competition in ways that appear inconsistent with the level playing field required by the internal market;
- Tax haven activity is significant. 7% of turnover and 8% of employees of these companies were located in recognised tax havens, excluding those in the EU.

In addition:

- The limited amount of data required by CRD IV Article 89 reduces the usefulness of the survey undertaken, most especially with regard to tax data where there appear to be worrying variations on the way in which data is being presented between different EU countries, so reducing the use of the data when all accounting information only has use in comparison;
- Worrying inconsistencies in the data surveyed have been found so that some banks report all the jurisdictions in which they trade whilst others only report a selection;
- There is room for considerable enhancement in the data published, which issue is the subject of the recommendations that follow this summary.

2. Recommendations

The particular issues with the data used for the purposes of this survey (excluding the obvious fact that not all banks had reported full data as yet) are:

a. It is apparent that there is inconsistent data reporting between various EU countries;
b. Data is not reported for every jurisdiction in which all banks trades;
c. It is not clear if data per jurisdiction is reported including or excluding intra-group sales;
d. Some tax data appears to be reported variously on the basis of cash paid and the tax provision in the accounts;
e. It is not clear if tax provisions, when reported, include deferred tax, or not.

Recommendations to resolve these issues are:

i. Data must be reported for every jurisdiction in which a bank trades, without exception;
ii. That if the existing Directive is to remain in use then it must be consistently interpreted across all EU jurisdictions or the full benefit of disclosure will be lost;
iii. Turnover should include intra-group sales in a jurisdiction with a reconciling adjustment to reported group turnover being provided;
iv. Profit should be reported including the consequence of intra-group transactions and be reconciled to group reported profit;

v. Tax should be recorded on the basis of the liability arising for the period split between current and deferred tax provisions as a limited number of banks do disclose.

Alternatively, the EU should require the publication by these banks of their OECD country-by-country reporting templates prepared in accordance with the standards suggested by that organisation in September 2014. Since all the banks reporting under CRD IV will be required to comply with this standard the publication of data produced on this basis will impose no additional cost upon EU banks and will avoid duplication of effort arising from multiple reporting under different standards.

3. The data

This report has been produced for the use of the Green / EFA Group of European Parliament MEPs. It summarises and interprets country-by-country reporting data from 26 European Union banks available in early June 2015. This data is summarised as follows:

Bank	Turnover €'m	Profit before tax €'m	Corporation Tax Paid €'m	Public Subsidies Received €'m	Average number of employees	Country of main residence
ABN AMRO	8,053	1,576	414	0	22,157	Netherlands
Banco Bilbao Vizcaya Argentaria, S.A	20,726	3,980	1,479	0	105,961	Spain
Bankia SA	4,008	912	227	0	14,413	Spain
Banque Fédérative du Crédit Mutuel	11,976	0	0	0	61,516	France
Barclays plc	24,785	4,431	823	1	135,336	UK
BNP Paribas	39,168	2,741	2,630	0	179,603	France
BPCE SA	23,257	5,925	1,915	0	103,199	France
Caixabank SA	13,306	0	0	0	31,890	Spain
Commerzbank AG	10,504	2,197	468	0	49,513	Germany
Credit Agricole	30,243	8,173	1,883	0	138,523	France
Dekabank	1,884	1,036	220	2	3,266	Germany
Deutschebank	32,871	3,861	1,413	0	98,135	Germany
DZ Bank AG	26,152	0	0	0	26,384	Germany
Helaba Landesbank Hessen-Thüringen	2,033	610	207	2	5,812	Germany
HSBC Holdings plc	54,724	0	0	0	258,701	UK
ING	15,679	3,856	1,033	2	55,950	Netherlands
KBC Bank	5,733	1,974	274	0	26,942	Belgium
KfW	455	0	0	0	567	Germany
LBBW Landesbank Baden-Württemberg	2,957	0	0	0	10,134	Germany
Lloyds Banking Group plc	21,834	0	0	0	90,910	UK
NIBC Bank NV	300	30	6	0	637	Netherlands
Rabobank Group	12,857	1,681	161	0	49,413	Netherlands
Royal Bank of Scotland plc	12,125	2,114	146	0	94,641	UK
Santander	56,489	0	0	0	177,701	Spain
Société Général	22,830	0	0	0	134,889	France
Standard Chartered plc	14,973	4,836	1,245	3	88,257	UK
	469,922	49,933	14,222	10	1,964,450	
Average profit rate		10.6%				
Average tax rate			28.5%			
Average number of employees					75,556	
Average turnover per employee €					239,213	
Average profit per employee € (only referring to relevant banks)					42,613	

This data is required to be reported by Article 89 of the Capital Requirements Directive IV[ii]. Under the terms of that Directive full disclosure is not required for 2014 until 1 July 2015. CRD IV requires that from 1 January 2015 Member States shall require each institution to disclose annually, specifying, by Member State and by third country in which it has an establishment, the following information on a consolidated basis for the financial year:

(a) name(s), nature of activities and geographical location;
(b) turnover;
(c) number of employees on a full time equivalent basis;
(d) profit or loss before tax;
(e) tax on profit or loss;
(f) public subsidies received.

On an interim basis data on items (a) to (c) were required to be published from 1 July 2014. Some banks voluntarily met the full requirement earlier than required to do so by law.

Some banks (e.g. Lloyds) have made it clear that they will not publish full data for 2014 before being legally required to do so even though their accounts for that year are now available. As a result for nine banks the limited data of the type required to be published in 2014 has been used in preparing this report. Some of this limited data (e.g. that for Lloyds) relates to 2013 and not 2014 but has been used as being the most recent (and only) data available. Data not originally published in euros has been translated at the average rates applying in the years in question. All data in this report is in millions of euros unless otherwise noted.

Whilst this report uses the data published by twenty six banks as selected for review by the Green / EFA Group of MEPs it is important to note that the CRD IV requirements do extend beyond these banks to 'all global systemically important institutions authorised within the Union, as identified internationally' in the financial services sector and that this report is, therefore selective in its scope.

Because the scale of reported public subsidies received by banks is so small no analysis has been undertaken on this data.

4. The hypothesis

The first ever intended use of country-by-country reporting was as a risk assessment tool to determine whether or not the companies reporting in this way might be partaking in relocation of their profits for the purpose of reducing their tax liabilities. There are other potential uses for country-by-country reporting data but they are ignored in this report.

This report has looked for evidence that relocation of profits – now described by the Organisation for Economic Cooperation and Development as base erosion and profits shifting – has taken place.

5. Limitations in the available data

It must be stressed that there are considerable limitations in the data published for undertaking this exercise. In summary these are:

a. As already noted, some of the banks surveyed have not yet published profits and tax paid data. The remaining data that they published was of little use for most of the analysis included in this report;

b. The basis on which the banks are reporting is not consistent because local legal interpretation was allowed on what certain terms in the Directive were meant to mean. So, for example, whereas turnover, profit and employee data clearly relate to a particular accounting year end the Directive said in its preamble:

   > *'Increased transparency regarding the activities of institutions, and in particular regarding profits made**, taxes paid** and subsidies received, is essential for regaining the trust of citizens of the Union in the financial sector. Mandatory reporting in that area can therefore be seen as an important element of the corporate responsibility of institutions towards stakeholders and society*[iii]*. (Highlight added)*

   Unfortunately this note has resulted in some countries, such as the UK, requiring that the reported tax figure be corporation tax paid whilst in some other jurisdictions it appears that accounting data for the reporting period is disclosed e.g. BNP Paribas reporting under French regulation disclosed current and deferred tax provisions. This, again, creates confusion: the only relevant requirement is the current tax provision but some other banks may have reported a full provision included deferred tax liabilities. It is therefore stressed that there may be inconsistencies in the tax data used in this report that cannot be resolved. This is particularly important in the case of UK banks, at least, where the tax data disclosed may have only little relationship to the reported profit for a year.

c. It is unclear in all cases whether the data disclosed solely reflects third party transactions and so reconciles directly with the reported turnover in the financial statements to which the disclosure relates (although this does appear to be the case for many banks) or whether the disclosure is of local data before intra-group transactions are eliminated, as is, for example, the case with Barclays plc. This ambiguity does, again, produce uncertainty and reduces the value of the data available especially if as a result of only third party data being reported the consequence of intra-group transactions in which much of the likely base erosion and profits shifting takes place is suppressed for reporting purposes.

d. Some banks e.g. Barclays and some Spanish banks have not disclosed data for all the jurisdictions in which it appears that they trade, offering 'unallocated' data in its place.

The following summaries must be read in the light of these data limitations. Means of addressing them are noted in the section of this report making recommendations for improvement in data reporting.

6. Approaches used to data analysis

Three key approaches to the data have been used to seek support for the hypothesis that base erosion and profits shifting has taken place. It is not suggested that these methods are complete or the only ones available: they are the more obvious methods and those that were possible in the time available for preparation of this report.

These approaches are to:

a. Compare the reported basis of profit allocation for the sample of banks reporting comprehensive data with the profit allocation that would have arisen if profit had been recorded in line with the weighted average of the turnover and number of employees reported by the banks in question for the jurisdictions in which they operate. This approach is based on the risk assessment methods that the OECD suggests tax authorities might use to assess this issue. By stating the total potential reallocated profit as a proportion of declared turnover a ranking can be produced. The method is based on the principles of unitary taxation.

b. To find the jurisdictions in which each bank reports its highest turnover and profit per employee and to compare this with the average for each for the bank in question. The object is to identify by location where potential mis-statement might be arising and the potential scale of that mis-statement and to then express this as a ratio and so produce a ranking.

c. To calculate the weighting of turnover, profit, corporation tax paid and number of employees reported for a jurisdiction in proportion to the number for each for the bank as a whole wherever data permits. These weightings have then been compared, as follows:

    i. The difference between the profit and corporation tax weighting. This difference would show when more or less tax than expected might be paid in a jurisdiction in proportion to profit declared. This might indicate success, or otherwise, in seeking low tax rates;

    ii. The difference between the turnover and people weighting. This might indicate if turnover was being artificially relocated since it is assumed that a) staff are required to manage turnover and b) that in a global corporation there might be some consistency in this ratio between jurisdictions meaning that a discrepancy in staffing ratios might suggest aberrant reporting of turnover;

iii. The difference between profit and a combined and equally weighted turnover and people employed ratio. This might indicate the degree to which profit has been shifted from jurisdictions where real economic activity appears to be occurring towards those where little such actual activity appears to be arising.

In each case and for each bank data on the high and low value for each of these weightings was extracted. These high and low values were then compared to indicate the range of diversity within the bank on these issues. Where three weightings were prepared these were themselves also averaged to give an overall indication (and it is stressed it is no more) of the likelihood that economic substance and the form in which transactions are reported do not coincide. Where there was only one weighting to use that was used for overall assessment purposes instead. The resulting averaged ratios were then used to produce a ranking.

7. Results 1: unitary taxation risk assessment

Using the first method noted in section 6 produced the following table when data was ordered on the basis of the total value of profit that the risk assessment suggested had been moved between locations for reporting purposes:

	Net unitary reallocation EU	Net unitary reallocation - other countries	Net unitary reallocation - tax havens	Net unitary reallocation - unallocated	Total unitary reallocations	Total reallocations as a % of decalred turnover
BNP Paribas	-1,205	-1,583	2,788	0	10,691	27.3%
Standard Chartered plc	-1,334	1,129	-1,206	1,412	6,061	40.5%
Deutschebank	1,868	-1,332	-536	0	5,900	17.9%
Banco Bilbao Vizcaya Argentaria, S.A	2,617	-2,241	-21	-356	5,607	27.1%
ING	893	-388	-505	0	5,251	33.5%
Royal Bank of Scotland plc	190	-34	-150	-5	3,840	31.7%
Barclays plc	-295	464	-222	53	3,396	13.7%
Rabobank Group	950	-921	-29	0	2,424	18.9%
Credit Agricole	282	-246	-36	0	2,255	7.5%
Commerzbank AG	290	-177	-20	-94	2,004	19.1%
BPCE SA	339	-326	-13	0	1,499	6.4%
KBC Bank	15	-0	-15	0	874	15.3%
ABN AMRO	181	-99	-60	-22	482	6.0%
Bankia SA	47	-43	0	-3	93	2.3%
Dekabank	-0	0	0	0	69	3.7%
Helaba Landesbank Hessen-Thüringen	-6	-2	10	-2	37	1.8%
NIBC Bank NV	0	0	0	0	8	2.6%
Société Général	0	0	0	0	0	0.0%
DZ Bank AG	0	0	0	0	0	0.0%
Banque Fédérative du Crédit Mutuel	0	0	0	0	0	0.0%
Lloyds Banking Group plc	0	0	0	0	0	0.0%
KfW	0	0	0	0	0	0.0%
LBBW Landesbank Baden-Württemberg	0	0	0	0	0	0.0%
Santander	0	0	0	0	0	0.0%
Caixabank SA	0	0	0	0	0	0.0%
HSBC Holdings plc	0	0	0	0	0	0.0%

Data in red suggests that there is over-reporting and data in black under-reporting. Jurisdictions were sorted for the purposes of this exercise between members states and non EU member states with the latter split between those not on the Tax Justice Network Financial Secrecy Index and those which are (which includes many of the well known tax havens as well as Singapore and Switzerland).

The method of reallocation used apportions the profits of the bank to states based on a formula. One third of the allocation of total profit is based on the total number of staff in each jurisdiction in which the bank operates in proportion to the total for the bank; another third is allocated on the basis of its total turnover in the jurisdiction in proportion to the total for the bank as a whole and the last third is apportioned in the same way based on assets invested.

This method assumes, firstly, that the bank is managed as a unitary whole i.e. it makes profits and losses based on decisions taken at group level and that these should then be reflected in the reported profit (or loss, if the group as a whole made one) in each place in which it works. Since banks usually present aggregated accounts on a consolidated basis to represent their financial performance that clearly imply that this assumption holds true we think it appropriate to make that assumption for the purposes of this exercise.

Secondly, the method assumes that the bank has similar costs of capital and similar procedures in each location in which it trades. Given that banks have broadly similar responsibilities to regulators and consistent duties to maintain financial controls in each state in which they operate we, again, think this broad assumption appropriate.

What is readily apparent is that in cases where banks report significantly differing profit rates between the jurisdictions in which they work this methodology will appear to suggest that significant reallocation of profit is taking place within a group. Indeed, if the group as a whole makes a profit but there is a substantial loss recorded in one jurisdiction (as is the case with BNP Paribas, for example, but which was also true of a number of banks that appear to record losses in their head office jurisdictions but profits in many other places) then the location recording the loss will appear to have a substantially under-recorded share of profits as a whole and those locations which must, to counter balance, have proportionately above average profit rates will do the reverse. The greater the inconsistency in profit reporting between jurisdictions there is the more this apparent reallocation can be, to the extent that it is possible, dependent upon the relative ratio of the profit / loss diversity in proportion to overall aggregate profits, for reallocations to exceed the amount of overall aggregate profit reported.

We stress, this does not invalidate the methodology: in broad economic terms the existence of group companies operating in multiple jurisdiction only makes sense if the two assumptions noted at least broadly hold true. If they do not then the group may be better off being split up, or disposing of units. Alternatively the method can indicate profit misallocation for tax.

The important issue to note is that which of these statements is true cannot be determined for sure without additional data from the banks that have reported. The CRD IV data poses at least as many questions as it answers and that is why additional accounting disclosure is required if this data is to make complete sense. It is very obviously in the best interests of the banks to provide this data. Perhaps as importantly, it is also in the best interests of the users of their accounts that they do.

What is apparent is that there appears to be very consistent relocation of profit from EU states to tax havens according to this methodology. The exception is BNP Paribas where the result is distorted by the recording of a €2.9 billion loss in Switzerland.

There also appears to be regular re-allocation of profit out of the EU to non-tax haven states according to this data. As later data will note, much of this is to the USA.

When the data is sorted in proportion to the scale of the bank's activities a different ordering is suggested, as follows:

	Total unitary reallocations	Total reallocations as a % of decalred turnover	Ranking
Standard Chartered plc	6,061	40.5%	1
ING	5,251	33.5%	2
Royal Bank of Scotland plc	3,840	31.7%	3
BNP Paribas	10,691	27.3%	4
Banco Bilbao Vizcaya Argentaria, S.A	5,607	27.1%	5
Commerzbank AG	2,004	19.1%	6
Rabobank Group	2,424	18.9%	7
Deutschebank	5,900	17.9%	8
KBC Bank	874	15.3%	9
Barclays plc	3,396	13.7%	10
Credit Agricole	2,255	7.5%	11
BPCE SA	1,499	6.4%	12
ABN AMRO	482	6.0%	13
Dekabank	69	3.7%	14
NIBC Bank NV	8	2.6%	15
Bankia SA	93	2.3%	16
Helaba Landesbank Hessen-Thüringen	37	1.8%	17

Banks without data are not noted in this listing.

This ranking is considered more appropriate for overall assessment purposes of each bank as it indicates potential reallocation of profit as a proportion of total declared turnover, which is considered to be (at this stage of research) the potentially most stable and so reliable indicator of the extent of profit shifting activity resulting from the relocation of the place where activities are recorded. It is stressed that the total unitary reallocations includes both under and over allocations i.e. all such allocations are treated for this purpose as positive numbers.

8. Results 2: maximum turnover and profits per employee

Using the second method noted in section 6 produced the following table when data on the maximum turnover and profit per employee engaged in any one jurisdiction in which the bank operated was identified, with the data listed alphabetically in the first instance:

	Maximum income per head	Country	Maximum profit per head		Profit % in location	Maximum turnover per head as a ratio of average turnover per head	Mazimum profit pe head as a ratio of average profit per head
ABN AMRO	2,272,727	Norway	1,772,727	Norway	78%	6.3	24.9
Banco Bilbao Vizcaya Argentaria, S.A	3,000,000	Ireland	3,200,000	Ireland	107%	15.3	85.2
Bankia SA	279,086	Spain	266,667	Unallocated		1.0	4.2
Banque Fédérative du Crédit Mutuel	1,554,217	USA	-			8.0	
Barclays plc	16,266,667	Luxembourg	15,833,333	Luxembourg	97%	88.8	483.6
BNP Paribas	1,028,736	Ireland	844,828	Ireland	82%	4.7	55.4
BPCE SA	2,222,222	Ireland	1,777,778	Ireland	80%	9.9	31.0
Caixabank SA	9,133,333	Unallocated	-			21.9	
Commerzbank AG	950,000	Netherlands	725,000	Netherlands	76%	4.5	16.3
Credit Agricole	1,965,517	Australia	1,517,241	Australia	77%	9.0	25.7
Dekabank	642,651	Luxembourg	435,159	Luxembourg	68%	1.1	1.4
Deutschebank	21,000,000	Malta	20,750,000	Malta	99%	62.7	527.4
DZ Bank AG	7,708,333	Norway	-			7.8	
Helaba Landesbank Hessen-Thüringen	1,727,273	Ireland	909,091	Ireland	53%	4.9	8.7
HSBC Holdings plc	467,028	Australia	-			2.2	
ING	1,555,556	Ireland	1,130,000	Ireland	73%	5.6	16.4
KBC Bank	2,657,895	Luxembourg	2,447,368	Luxembourg	92%	12.5	33.4
KfW	1,170,000	UK	-			1.5	
LBBW Landesbank Baden-Württemberg	1,298,507	USA	-			4.5	
Lloyds Banking Group plc	1,400,000	Singapore	-			5.8	
NIBC Bank NV	518,367	Netherlands	78,431	Germany		1.1	1.7
Rabobank Group	7,615,385	Curacao	5,615,385	Curacao	74%	29.3	165.1
Royal Bank of Scotland plc	3,833,333	Finland	3,666,667	Finland	96%	29.9	164.2
Santander	2,323,529	Ireland	-			7.3	
Société Général	1,292,683	Denmark	-			7.6	
Standard Chartered plc	8,379,310	Ireland	3,379,310	Ireland	40%	49.4	61.7

The country featuring most commonly as having the maximum income per head is Ireland (7 banks, 27% of the sample) followed by Luxembourg (3), the Netherlands (2), Norway (2), Australia (2) USA (2), with Denmark, the UK, Finland, Spain, Malta, Curacao, Singapore and 'unallocated data' all appearing once each. The fact that unallocated activity can appear suggests that the bank in question is clearly not complying with the requirement to disclose all activity by country.

To give an indication of significance the data was reordered basing the rankings on the ratio that the maximum turnover per head for a jurisdiction had to the average turnover per head for the bank in question to give some indication of the scale of aberration for the reported data. This, together with a similar ranking for profit per hear, produced the following table:

	Maximum income per head	Country	Maximum profit per head		Maximum turnover per head as a ratio of average turnover per head	Mazimum profit pe head as a ratio of average profit per head	Ranking based on turnover per head	Ranking based on profit per head
Barclays plc	16,266,667	Luxembourg	15,833,333	Luxembourg	88.8	483.6	1	2
Deutschebank	21,000,000	Malta	20,750,000	Malta	62.7	527.4	2	1
Standard Chartered plc	8,379,310	Ireland	3,379,310	Ireland	49.4	61.7	3	6
Royal Bank of Scotland plc	3,833,333	Finland	3,666,667	Finland	29.9	164.2	4	4
Rabobank Group	7,615,385	Curacao	5,615,385	Curacao	29.3	165.1	5	3
Caixabank SA	9,133,333	Unallocated	-		21.9		6	
Banco Bilbao Vizcaya Argentaria, S.A	3,000,000	Ireland	3,200,000	Ireland	15.3	85.2	7	5
KBC Bank	2,657,895	Luxembourg	2,447,368	Luxembourg	12.5	33.4	8	8
BPCE SA	2,222,222	Ireland	1,777,778	Ireland	9.9	31.0	9	9
Credit Agricole	1,965,517	Australia	1,517,241	Australia	9.0	25.7	10	10
Banque Fédérative du Crédit Mutuel	1,554,217	USA	-		8.0		11	
DZ Bank AG	7,708,333	Norway	-		7.8		12	
Société Général	1,292,683	Denmark	-		7.6		13	
Santander	2,323,529	Ireland	-		7.3		14	
ABN AMRO	2,272,727	Norway	1,772,727	Norway	6.3	24.9	15	11
Lloyds Banking Group plc	1,400,000	Singapore	-		5.8		16	
ING	1,555,556	Ireland	1,130,000	Ireland	5.6	16.4	17	12
Helaba Landesbank Hessen-Thüringer	1,727,273	Ireland	909,091	Ireland	4.9	8.7	18	14
BNP Paribas	1,028,736	Ireland	844,828	Ireland	4.7	55.4	19	7
Commerzbank AG	950,000	Netherlands	725,000	Netherlands	4.5	16.3	20	13
LBBW Landesbank Baden-Württembe	1,298,507	USA	-		4.5		21	
HSBC Holdings plc	467,028	Australia	-		2.2		22	
KfW	1,170,000	UK	-		1.5		23	
Dekabank	642,651	Luxembourg	435,159	Luxembourg	1.1	1.4	24	17
NIBC Bank NV	518,367	Netherlands	78,431	Germany	1.1	1.7	25	16
Bankia SA	279,086	Spain	266,667	Unallocated	1.0	4.2	26	14

It will be noted that some banks had maximum turnover per person employed in a jurisdiction little different to their average across the bank as a whole. The scale of disparity at the top of the rankings is very high indeed, whilst the profit rankings suggest that in a great many cases the reallocated income has very little commercial substance to it. The known tax havens of Luxembourg and Ireland dominate the top of the list with Malta also being known to be a significant tax haven for German companies. Curacao and Finland are more surprising entries.

9. Results 3: Ratio analysis

Using the third method noted in section 6 produced the following table when data was ranked in accordance with the average of the data:

	Difference profit and corporation tax weighting Range %	Difference turnover and people weighting Range %	Difference profit and combined turnover and people weighting Range %	Weighted differences Range %	Ranking
Rabobank Group	513.8%	13.8%	92.7%	206.7%	1
BNP Paribas	157.3%	7.0%	147.2%	103.9%	2
Royal Bank of Scotland plc	91.5%	20.6%	111.4%	74.5%	3
Deutschebank	69.7%	22.9%	80.6%	57.7%	4
Banco Bilbao Vizcaya Argentaria, S.A	59.9%	6.6%	98.1%	54.9%	5
Standard Chartered plc	61.3%	21.8%	54.7%	45.9%	6
Barclays plc	70.0%	29.8%	32.8%	44.2%	7
ING	24.8%	14.4%	72.8%	37.3%	8
Commerzbank AG	32.6%	12.7%	57.3%	34.2%	9
KBC Bank	52.1%	22.6%	23.8%	32.8%	10
NIBC Bank NV	46.7%	12.8%	23.8%	27.7%	11
HSBC Holdings plc	0.0%	17.8%	0.0%	17.8%	12
Société Général	0.0%	15.5%	0.0%	15.5%	13
Santander	0.0%	14.3%	0.0%	14.3%	14
Credit Agricole	22.0%	5.0%	8.3%	11.8%	15
Dekabank	23.8%	2.4%	6.7%	10.9%	16
BPCE SA	4.2%	12.4%	15.2%	10.6%	17
Helaba Landesbank Hessen-Thüringen	21.6%	5.7%	2.6%	9.9%	18
ABN AMRO	6.6%	1.7%	15.5%	7.9%	19
DZ Bank AG	0.0%	6.4%	0.0%	6.4%	20
LBBW Landesbank Baden-Württemberg	0.0%	4.6%	0.0%	4.6%	21
Bankia SA	2.8%	0.7%	9.8%	4.4%	22
Lloyds Banking Group plc	0.0%	4.1%	0.0%	4.1%	23
Caixabank SA	0.0%	4.0%	0.0%	4.0%	24
Banque Fédérative du Crédit Mutuel	0.0%	3.6%	0.0%	3.6%	25
KfW	0.0%	3.2%	0.0%	3.2%	26

Any bank with an overall weighting difference of less than 20% appears to have fairly low risk of significant profit shifting on the basis of this data. It is stressed that this is a subjective estimate: enhanced data over time will improve the quality of that judgement but at this point it appears that this will imply relatively close allocation of profits to underlying likely levels of corporate activity. Some banks in this category may also be radically re-appraised when more data on their activities is available.

This then leaves eleven remaining banks, most located in the UK, Germany or the Netherlands, where the risk of profit shifting appears to be significant.

It should be stressed that the top two banks may be outliers. The extraordinary difference between the profit and corporation tax weightings ratios for Rabobank resulted from a tax credit in its accounts attributed to the Netherlands that was almost three times its declared profit for 2014 in that country, for example. This, however, just highlights one of the fundamental deficiencies in the CRD IV data: as already noted, it was unfortunate that when this legislative requirement was drafted the demand made on corporate tax disclosure was for tax payments made (or received) in a year. This made little accounting sense since such payments and receipts are heavily influenced by the financial performance of the bank in earlier years, but that earlier year performance may have little relationship to the currently declared profits and the consequence is that information declared on profits and tax payments need have very little correlation to each other. This may explain the tax data for Rabobank but its ratio comparing the combined employee and turnover ratio with profit is also high and that is unlikely to be distorted by such reporting problems. The use of overall averaged data helps smooth these aberrations.

10.Combining the bank based results

A better index of profit shifting potential might be found by combining these results, which produces the following outcome:

	Unitary reallocation of profits ranking	Maximum turnover per employee ranking	Maximum profit per employee ranking	Weighted ratios ranking	Combined and weighted score	Overall ranking
Royal Bank of Scotland plc	3	4	4	3	3.5	1
Deutschebank	8	2	1	4	3.8	2
Rabobank Group	7	5	3	1	4.0	3
Standard Chartered plc	1	3	6	6	4.0	4
Barclays plc	10	1	2	7	5.0	5
Banco Bilbao Vizcaya Argentaria, S.A	5	7	5	5	5.5	6
BNP Paribas	4	19	7	2	8.0	7
KBC Bank	9	8	8	10	8.8	8
ING	2	17	12	8	9.8	9
Credit Agricole	11	10	10	15	11.5	10
DZ Bank AG		12	14	20	11.5	11
BPCE SA	12	9	9	17	11.8	12
Commerzbank AG	6	20	13	9	12.0	13
Société Général		13		13	13.0	14
Santander		14		14	14.0	15
ABN AMRO	13	15	11	19	14.5	16
Caixabank SA		6		24	15.0	17
NIBC Bank NV	15	25	16	11	16.8	18
HSBC Holdings plc		22		12	17.0	19
Dekabank	14	24	17	16	17.8	20
Banque Fédérative du Crédit Mutuel		11		25	18.0	21
Lloyds Banking Group plc		16		23	19.5	22
Bankia SA	16	26	15	22	19.8	23
LBBW Landesbank Baden-Württemberg		21		21	21.0	24
KfW		23		26	24.5	25
Helaba Landesbank Hessen-Thüringer	17	18		18	26.5	26

This is considered the overall ranking based on potential risk of base erosion and profit shifting indicated by the available data.

11.Country data

In addition to yielding data on bank performance the available data also provides information on those countries where it is most likely that profits have been reallocated to, and from. This data is based solely on the seventeen banks for which complete reported data is available. The data for all countries where a reallocation of more than €100 million was suggested to arise for the sample as a whole on a unitary basis in the basis of this data was as follows:

Country	Profit based on combined turnover and people weighting	Declared profit	Difference weighted and actual profit
USA	2,718	5,592	-2,874
Belgium	1,068	3,855	-2,787
Luxembourg	485	2,743	-2,258
Ireland	162	1,832	-1,670
Singapore	603	1,745	-1,142
Mexico	1,532	2,563	-1,031
France	8,468	9,276	-808
Hong Kong	1,325	1,797	-472
Australia	197	664	-467
UAE	209	658	-449
Jersey	72	488	-416
Peru	128	509	-381
Czech Republic	351	693	-342
Japan	126	403	-276
Colombia	132	398	-266
China	605	870	-265
Venezuela	134	396	-262
Mauritius	40	277	-237
Argentina	363	564	-201
Turkey	429	579	-150
New Zealand	16	159	-143
Bangladesh	33	166	-133
Isle of Man	25	152	-127
South Africa	549	671	-122
Kenya	78	192	-114
Romania	183	75	108
Chile	403	249	154
Hungary	93	-70	163
Russia	419	233	186
Portugal	233	36	197
Ukraine	123	-76	199
South Korea	174	-590	764
Germany	6,832	5,728	1,104
Brazil	1,727	392	1,335
Unallocated	701	-785	1,486
Netherlands	2,024	199	1,825
Switzerland	258	-2,716	2,974
UK	7,642	4,342	3,300
Spain	3,483	-874	4,357

Over the sample as a whole of some 131 countries and jurisdictions the difference between reported and weighted profits does, of course, net to zero.

In this table red data in the reallocation column suggests that there is net over-reporting of income and black under-reporting of income.

There can be no doubt that some of the reported differences are due to underlying economic circumstances. The Swiss data is distorted by a €2.9 billion loss reported by BNP Paribas in that country. UK data is likely to be distorted by head office functions recording losses for financial misdemeanours charged on many UK banks. The Spanish economy has, undoubtedly, had a difficult time.

The lesson from the Netherlands, and maybe the UK and Germany, is that it does not appear to pay, at least in terms of reported profit and so likely potential tax yield, to host bank headquarters. This does not appear to be true of France, which appears to enjoy over-reporting of profit. It is also not true of the USA, which appears to have exceptionally high profit reporting: why is not readily apparent although some banks, e.g. BNP Paribas, suggest that income from the Cayman Islands is reported in the USA.

It is notable that there is exceptionally low reporting of income and profits in many of the expected tax havens such as Bermuda, Cayman and the British Virgin Islands. This is also true of Guernsey, although it seems likely that many banks include this island in their Jersey data.

What is, perhaps, unsurprising is that there appears to be above expected reporting in many jurisdictions where this might have been anticipated including Belgium, Luxembourg, Ireland, Singapore, Hong Kong, UAE, Jersey, Mauritius and the Isle of Man, all of which have a reputation for acting as offshore tax locations for various reasons.

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[i] My thanks go to Grace Blakely for her work in the research stage of producing this report

[ii] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:176:0338:0436:EN:PDF

[iii] Quoted in http://www.pwc.co.uk/en_UK/uk/tax/assets/a-practical-guide-to-the-uk-regulations-cbcr-under-crd-iv.pdf