

Impact of corporate income tax reforms at the EU level on European business taxpayers

Report on the impact on taxable profits

9 July 2008

Contents

1. Objectives and outline of the study
2. Headline results
3. Participation and level of data provision
4. Survey results: Supporting Charts and Tables

Appendices

- I. Terms of reference for the study
- II. Participant questionnaire (taxable profits and effective tax rate)
- III. Calculator for computation of taxable profits
- IV. Briefing book on WP57 (CCCTB: Possible elements of a technical outline), WP60 (CCCTB: Possible elements of the sharing mechanism) and WP61 (CCCTB: Possible elements of the administrative framework).

This Report has been prepared as general information and incorporates aggregated data from various third party sources and respondents. PricewaterhouseCoopers LLP (PwC) has not independently verified, validated, or audited the data received from such third parties. PwC makes no representations or warranties with respect to the accuracy of the information contained in this Report, and in no event will PwC, its related partnerships or entities, or the partners, agents or employees thereof be liable to the user (subject to any agreement with the user to the contrary) or to any third party (including any of the user's clients) for any inaccuracy of information contained in this Report (including any errors or omissions in its content, regardless of the cause of such inaccuracy, error or omission), for any usage of, decision made or action taken in reliance on the Report, or for any consequential, special or similar damages even if advised of the possibility of such damages. This Report is not intended to give legal, tax, accounting or other professional advice. No user should act on the basis of any matter contained in this Report without considering and, if necessary, taking appropriate professional advice on their individual requirements.

1 Objectives and outline of the study

- 1.1 The European Commission are conducting a regulatory impact assessment of the possible introduction of a Common Consolidated Corporate Tax Base (CCCTB).
- 1.2 To assess the impact of the possible introduction of a CCCTB, information has been gathered from Multinational Companies (MNCs) to form a view of the impact on taxable profits and effective tax rates.
- 1.3 PwC have developed templates to gather the data to estimate how a CCCTB will potentially impact taxable profits and effective tax rates when compared with the current system of national tax regimes. Additionally, data has been collected to enable a comparison with an alternative scenario, a Common Corporate Tax Base (CCTB), which is not consolidated cross-border.
- 1.4 For the base case (scenario 1), companies were requested to provide data on their national GAAP (or IFRS where permissible) profits before tax (PBT or EBT), their national tax regime cash tax charges, and therefore their national GAAP/tax effective cash tax rate (ETRs). Companies were also requested to provide national taxable profits by country.
- 1.5 Companies were also requested to provide details of brought forward local tax losses and any national tax rules limiting the utilisation thereof e.g. where only a certain level (€1m) of losses can be fully used in the succeeding year (Germany) with only partial utilisation above €1m, or where there is a time bar on loss carry forward (e.g. Italy 5 years, The Netherlands 9 years etc) limiting the use of their carry forward tax losses in the review period.
- 1.6 For CCCTB (scenario 2) and CCTB (scenario 3), companies were provided with a summary of WP57 (CCCTB: Possible Elements Of A Technical Outline), WP60 (CCCTB: Possible Elements Of The Sharing Mechanism) and WP 61 (CCCTB: Possible Elements Of The Administrative Framework)
- 1.7 Companies were also provided with a template for each of the 27 EU countries, and requested to populate the template with the EBT of their companies/permanent establishments in each Member State (in aggregate for each Member State) and to enter the principal adjustments envisaged under WP57 to arrive at that country's element of that group's CCCTB base, prior to aggregation to effect cross-border consolidation and formulary apportionment of the resulting CCCTB taxable profit back to participating Member State companies.
- 1.8 Companies were also requested to provide data on employees (headcount and Euro amount of payroll), property (tangible assets: tax residue brought forward from national tax systems, and including loan book receivables for banks) and sales by destination.
- 1.9 Data was requested for two years, to reduce the impact of unusual circumstances in any given year. The two year base period was calendar 2005/2006 for all companies in the sample, with the exception of one for which the base period was calendar 2006/2007.
- 1.10 Electronic templates were sent to the Heads of Tax (Global or European), and data was gathered in the period from 9 April to 20 June 2008
- 1.11 Discussions have been held with participating MNCs in conference calls and on a one-to-one basis to deal with any issues arising in connection with the completion of the templates. Help-lines were also available throughout the period and have been well used.

- 1.12 Findings from the study are factual, and represent data provided by businesses based on the assumptions regarding the CCCTB and the CCTB given to them in the templates and in supplementary relevant documents agreed with the European Commission (in particular the Briefing Book on WP57, 60 & 61).
- 1.13 The data provided by MNCs has been sense checked and queried where relevant to eliminate inconsistencies and amended where there were errors. However, PwC has not verified or validated the data provided and does not give any representations or warranties as to the accuracy of the results of the study.
- 1.14 PricewaterhouseCoopers is one of the world's largest professional services organisations and integrity and confidentiality are paramount to our business. The information provided by MNCs has been aggregated to provide a bank of information on taxable profits and effective tax rates. As a matter of course, all data provided has been anonymised for the purposes of processing and analysis.
- 1.15 The options on confidentiality available to MNCs participating in the study were clearly indicated on the templates, these being:
- to share data on a named basis,
 - to share data but not on a named basis, or
 - complete anonymity and sharing of data only on an aggregated basis.
- 1.16 Regarding taxable profits and effective tax rates, all participating MNCs have requested complete anonymity regarding their participation and their data.
- 1.17 DG TAXUD of the European Commission have undertaken to treat the information as confidential, and the individual results of any company will not be published or otherwise released.
- 1.18 In collating the results of the participating MNCs, two main methods have been used. The first, the 'non-aggregated' approach, weights all MNCs equally regardless of size. The second, the 'aggregated' approach, sums together the results of MNCs, thus giving greater weighting to larger MNCs. In our analysis we have considered both approaches. Charts can be distinguished by their background colour; a pale-green background is used for the 'non-aggregated' approach, and a pale-yellow background for the 'aggregated' approach.
- 1.19 The 'non-aggregated' approach is calculated by expressing the tax base or charge for each country for each MNC as a percentage of the total for each MNC. The average of these percentages is then calculated for each country. For some analyses, there is then a further norming so that the total percentage for each scenario adds to 100%.
- 1.20 Examples of how to interpret charts produced using the 'non-aggregated' method are, first, charts showing the overall trend in tax base / tax charge (e.g. Figure 1 and Figure 7). Here, the tax base / charge for each MNC in each country is expressed as a percentage of the as-is total, and the results are then averaged across MNCs (thus the overall change in the size of the bars shows the average change in the size of the base). Secondly, charts showing the percentage split of tax base / charge (e.g. Figure 22 to Figure 24, Figure 51 to Figure 53) again express the tax base / charge for each MNC in each country as a percentage of the as-is total, and average the results, but the results are then normed so that the total for each scenario sums to 100%. Thus these charts show only the movement in share of base / charge between countries. Thirdly there are charts showing the movement in tax base, expressed as percentage points up or down (e.g., amongst others, Figure 4 and Figure 9). These isolate the changes shown in the previous type of charts. For example, if a given country had on average 12% of the as-is tax base, but 10% of the tax base under CCCTB, the figure shown for CCCTB would be -2%.

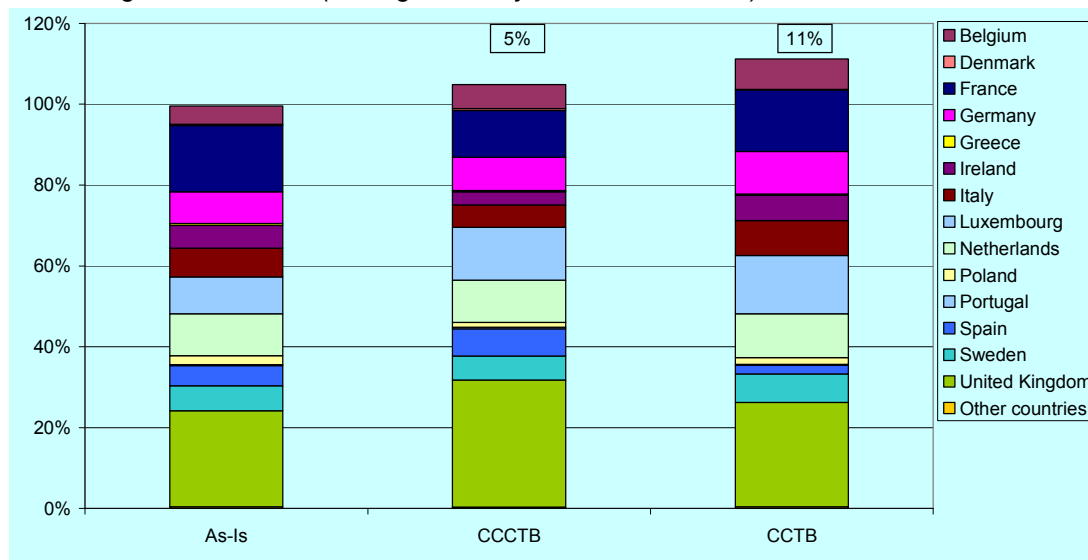
- 1.21 Except where otherwise specified, CCCTB results are calculated based on the following sharing mechanism: $\frac{1}{6}$ 'Number of employees' + $\frac{1}{6}$ 'Cost of employees' + $\frac{1}{3}$ 'Assets' + $\frac{1}{3}$ 'Sales by destination'.
- 1.22 Percentage splits in charts and tables do not always sum to exactly 100%. This is due to rounding effects.

2 Headline results

For the CCCTB

- 2.1 Over the companies sampled the average tax base over the two year base period increased by 5%.

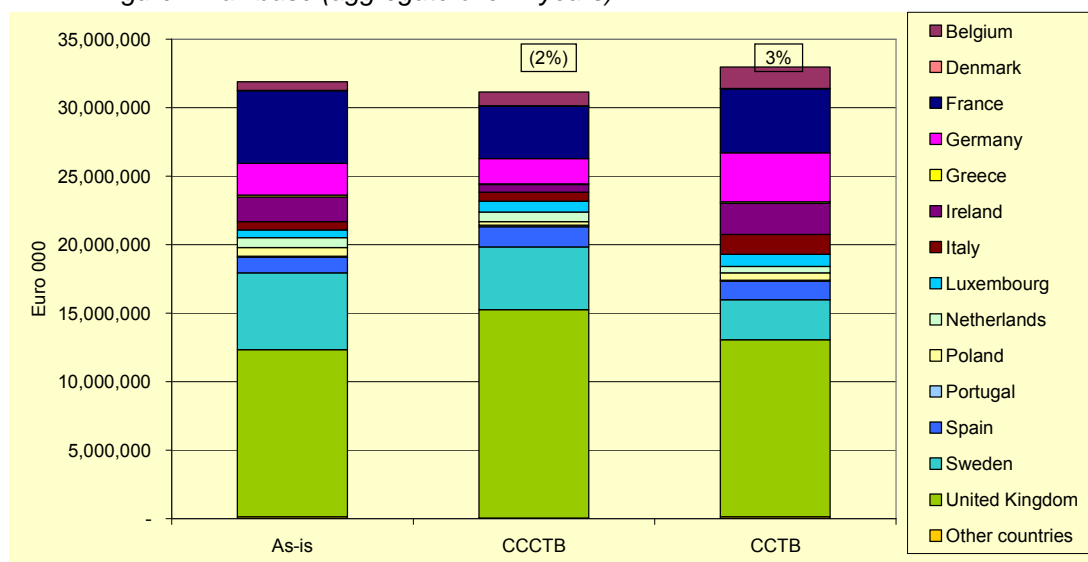
Figure 1 Tax base (average over 2 years, as-is = 100%)



	As-is	CCCTB	CCTB
Average sample tax base (% of as-is)	100%	105%	111%

- 2.2 Over the same period, the aggregated tax base decreased by 2% from €31.9bn to €31.1bn.

Figure 2 Tax base (aggregate over 2 years)



	As-is	CCCTB	CCTB
Aggregate sample tax base (€bn)	31.9	31.1	33.0

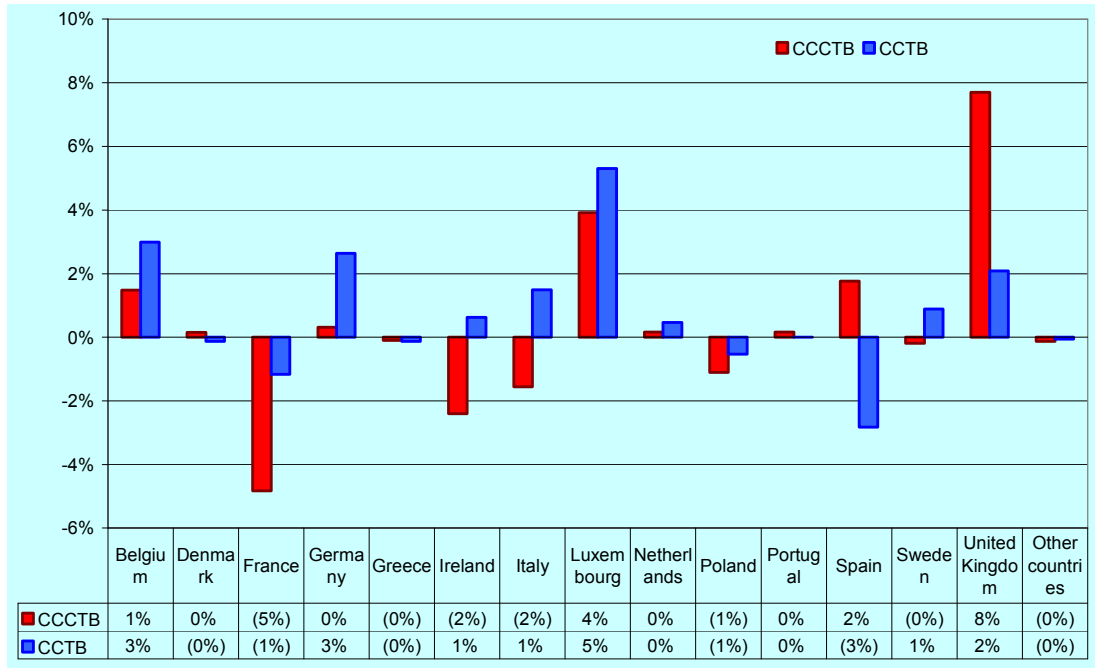
- 2.3 The change in size of tax base can be explained by reference to the harmonised corporate tax base, the opportunity for cross-border loss compensation under CCCTB, and the different effects of brought forward local losses (which remain at the national level). The effect of the harmonised corporate tax base is discussed in more detail in the CCTB section below.
- 2.4 The principal reason for the CCCTB taxable base being lower than the CCTB base is the increased opportunities for loss compensation provided by EU-wide consolidation. On average, losses compensated represent 5% of the as-is tax base under existing tax rules, but increase to 15% of the as-is tax base under CCCTB.

Figure 3 Loss compensation (aggregate) under scenarios 1 (as-is) and 2 (CCCTB)

	Losses compensated (€m)	Losses as % of as-is tax base
Year 1		
As-is	(1,511)	10%
CCCTB	(2,928)	20%
Difference	+1,417	+10%
Year 2		
As-is	(226)	1%
CCCTB	(1,942)	11%
Difference	+1,716	+10%
Average across 2 years		
As-is	(869)	5%
CCCTB	(2,435)	15%
Difference	+1,566	+10%

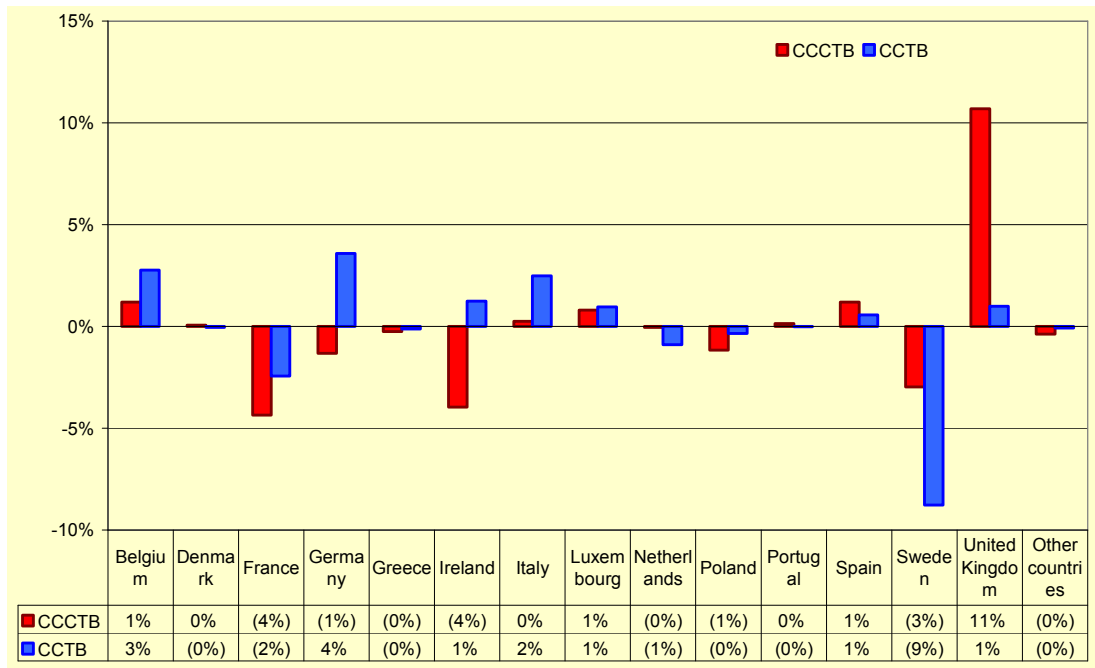
- 2.5 Note that the absolute amount of loss compensated in year 2 is lower than in year 1, despite the significant loss made in that year discussed elsewhere in this report. This fall may be attributed to two effects – in the first year, a considerable amount of local losses brought forward are relieved through the profits re-distributed via the apportionment mechanism. There are fewer local losses brought forward that can be relieved in this way in the second year. Secondly, the ability of a company to utilise group loss relief through the CCCTB pool is limited by the capacity of the other group companies to offset that loss against their own profits, and hence although a large loss was made, only a relatively modest proportion of that loss is compensated through the CCCTB pool. This is evident from Figure 14 in section 4 ‘Survey Results: Supporting Charts & Tables’.
- 2.6 The distribution of the CCCTB taxable base was materially different from the distribution of taxable profits under current national tax systems (see Figure 4 below). In particular, the UK was a material net gainer, followed by Luxembourg, Spain and Belgium, whereas France, Ireland, Italy and Poland were net losers.

Figure 4 Change in average share of tax base - percentage points up or down (average over 2 years)



2.7 The aggregate taxable base shows a similar picture (see Figure 5).

Figure 5 Change in share of aggregate tax base - percentage points up or down (average over 2 years)



2.8 Principal observations as regards factors influencing the redistribution of the national/CCTB tax base under CCCTB were the effect of the formulary apportionment, reallocating shares of taxable profits principally in favour of the UK, and also to a lesser extent to Spain, Belgium and Luxembourg, and away from France, Ireland, Sweden and to a lesser extent Germany and Poland.

2.9 The results of the formulary apportionment are due to the relative geographical distribution of apportionment factors. Figure 6 below shows the average distribution of

apportionment factors within the EU (not weighted according to size of MNC). It is worth noting that, for the average distribution of apportionment factors, the size of entities in a country or the number of MNCs in a certain country in the sample do not in themselves increase the proportion of taxable base allocated to that country; what is significant is where the share of the apportionment factors is disproportionately large relative to as-is profit.

2.10 Overall, the factors are relatively consistent in their distribution, with just a few exceptions. Germany is strong on Fixed Assets (defined as fixed tangible assets, excluding intangibles and financial assets, except in the case of banks). The UK is strong on all factors, and thus attracts a large share of the tax base. This reflects the high proportion of companies within the sample that are UK-domiciled and have a disproportionately high share of their apportionment factors within the UK, probably because of head-office functions being located there. Poland is significantly stronger on Employees than on the other factors, which appears to be a reflection of what was a low-wage economy. It is possible to speculate that this pattern might be repeated in other similar economies. Spain is strong on Sales (that is, sales by destination) which may be attributable to the activities of two large retail businesses in the sample.

Figure 6 Average percentage distribution of apportionment factors within EU

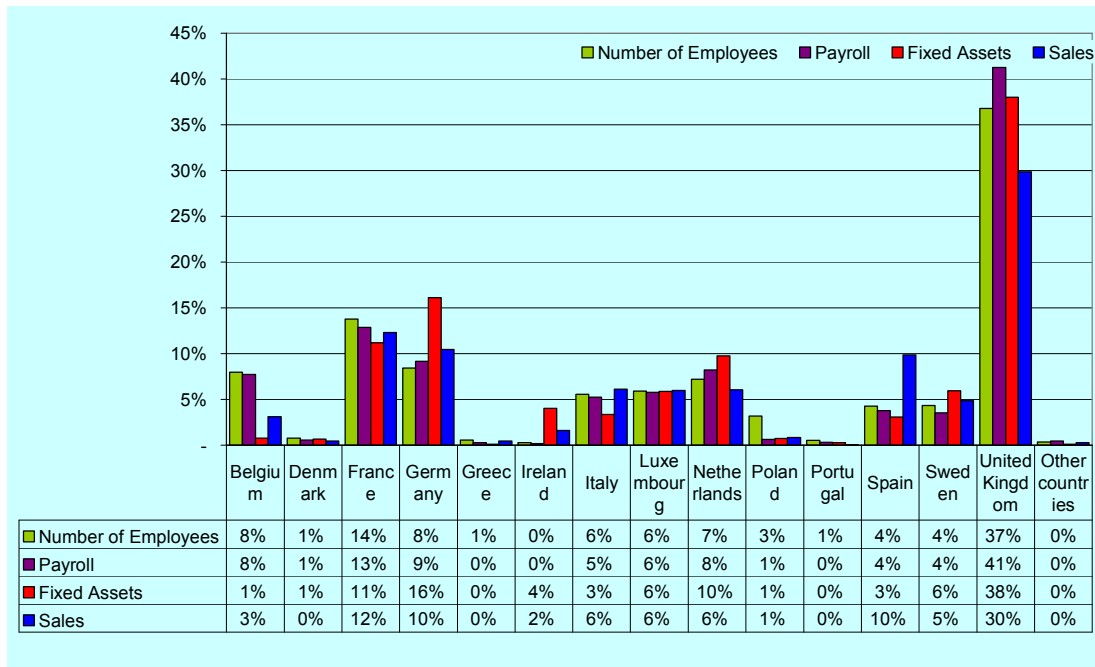
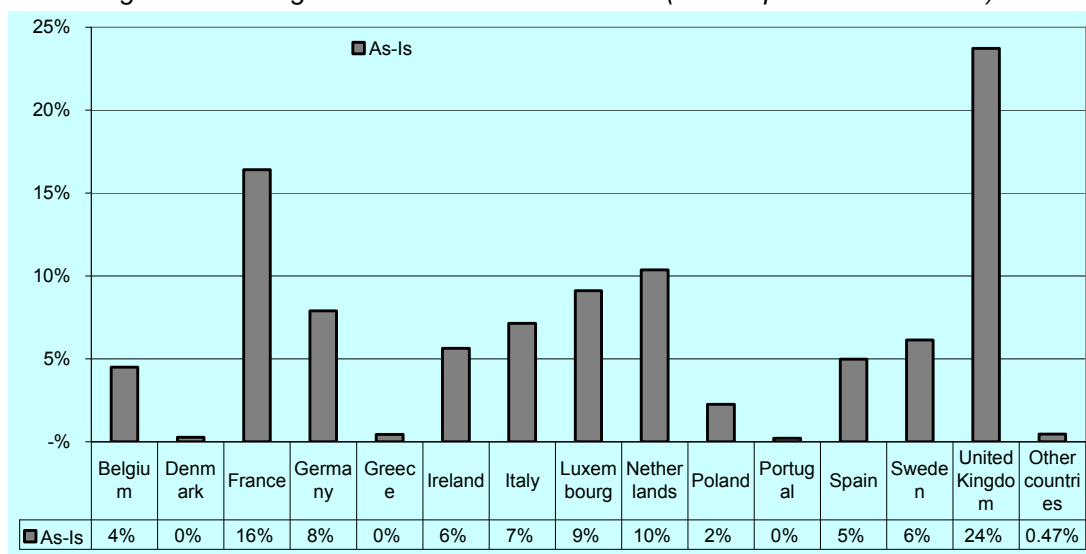


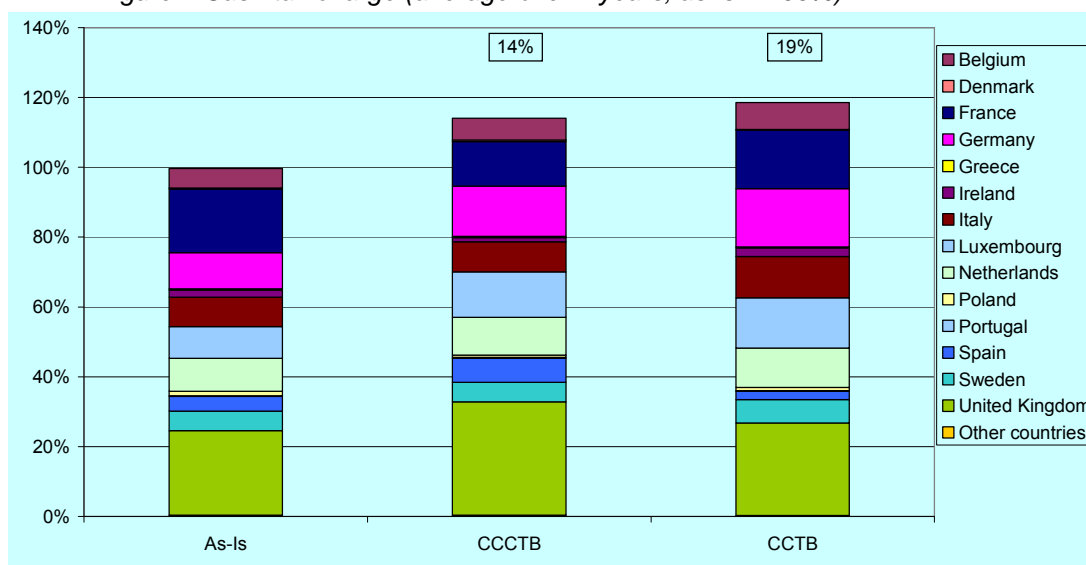
Figure 6B Average distribution of as-is tax base (for comparison with above)



2.11 Some simple sensitivity analysis was performed on the tax base, by excluding each MNC in turn from the calculations. The largest change in two-year aggregate tax base was +/- 10%. The average change in tax base on excluding any one MNC was +/- 2%. This suggests that any change in tax base within +/-2% should be treated as within the margin of error of the sample, while any change up to +/-10% should be treated with some caution.

2.12 In contrast to the tax base, the average tax charge of the companies studied over the same two year base period increased by 14%.

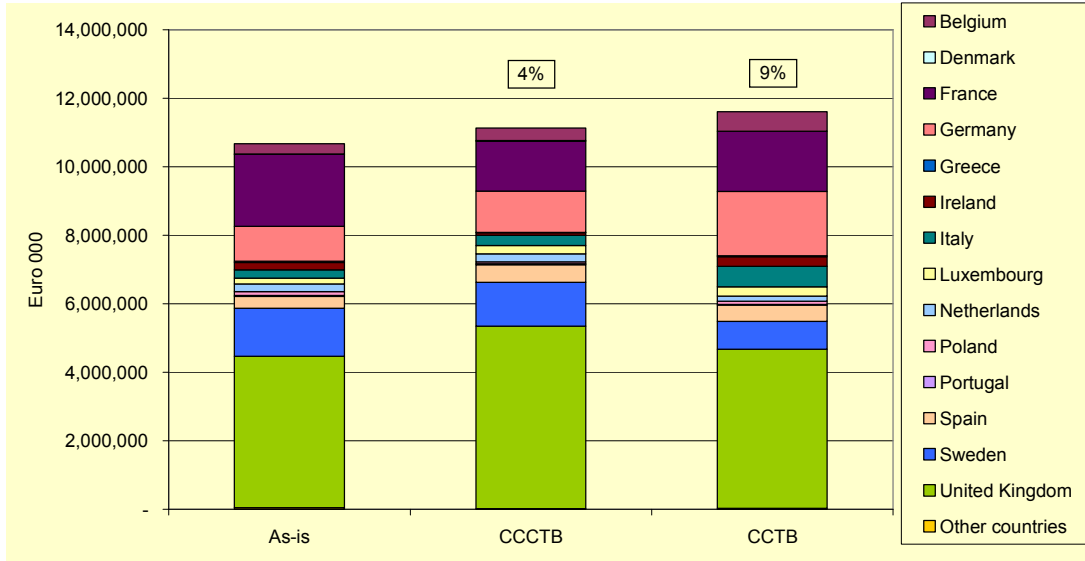
Figure 7 Cash tax charge (average over 2 years, as-is = 100%)



	As-is	CCCTB	CCTB
Average sample tax charge (% of as-is)	100%	114%	119%

2.13 The aggregate tax charge shows a similar trend; the tax charge increased by 4% from €10.7bn to €11.1bn.

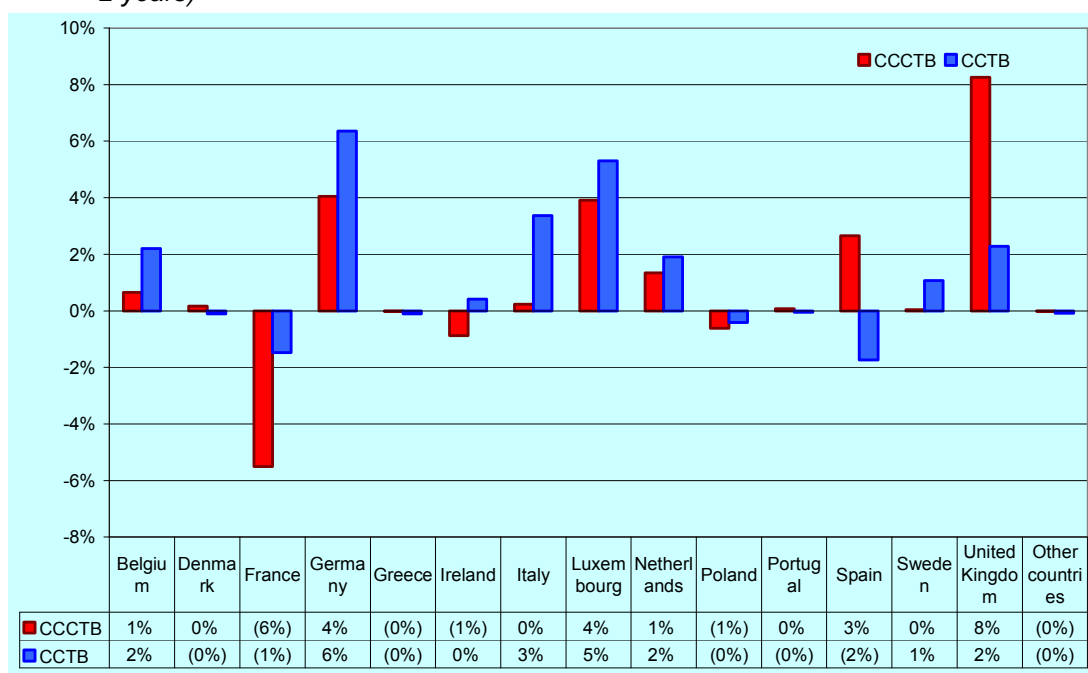
Figure 8 Cash tax charge (aggregate over 2 years)



	As-is	CCCTB	CCTB
Aggregate sample tax charge (€bn)	10.7	11.1	11.6

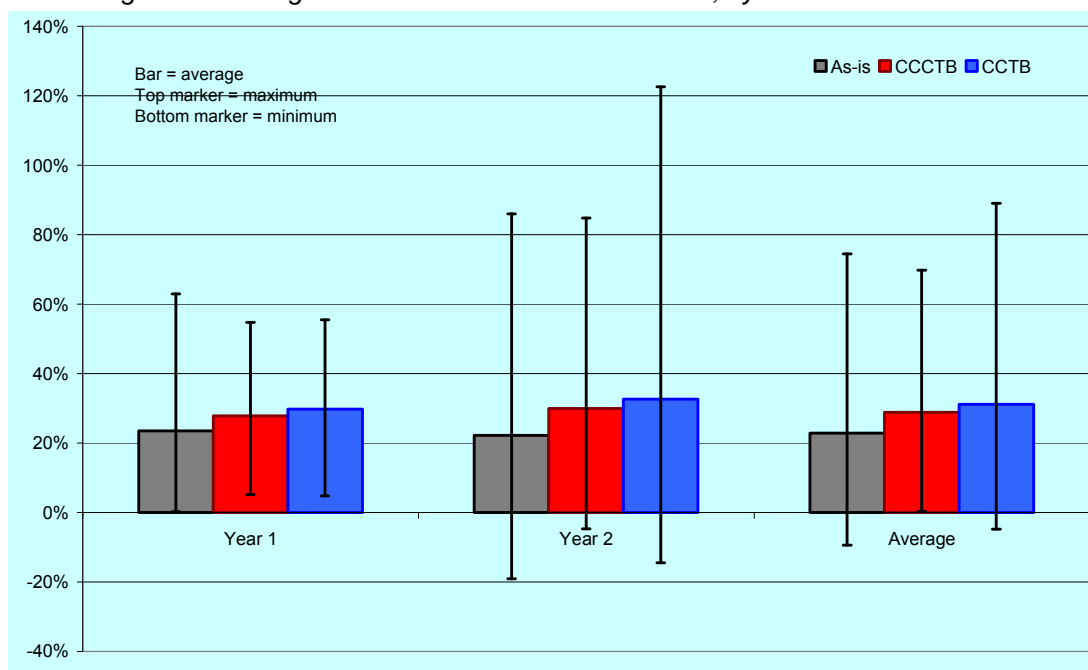
- 2.14 The increase in tax charge relative to tax base can be partially explained by the movement of taxable profits between higher- and lower-tax countries. The additional tax in countries gaining tax base (using the aggregate approach) amounts to approximately €1.4bn, whereas the reduction in tax charge in countries losing tax base is around €1.2bn, resulting in a net increase of approximately €0.2bn.
- 2.15 The remainder of the increase would appear to be attributable to the absence under CCCTB or CCTB of national reliefs given via the tax charge e.g. R&D or investment tax credits given via the tax charge rather than as an enhanced deduction and therefore reflected in taxable profits.
- 2.16 In addition, the 25% appropriation to a maximum six-year reserve of 25% of Swedish taxable profit is not replicated in the CCTB or CCCTB bases. When profits are increasing over time, this leads to the as-is cash tax charge appearing disproportionately low relative to the as-is tax base.
- 2.17 The distribution pattern for cash tax charge was similar to tax base distribution, with the UK gaining significantly, followed by Germany, Luxembourg and Spain; whereas France lost share of tax charge, followed by Ireland and Poland.

Figure 9 Change in share of tax charge - percentage points up or down (average over 2 years)



- 2.18 Some simple sensitivity analysis was also performed on the tax charge, using the same method described in 2.11 above. The largest change in two-year aggregate tax charge was +/- 11%. The average change in tax charge on excluding any one MNC was +/- 2%. This suggests that any change in tax charge within +/-2% should be treated as within the margin of error of the sample, while any change up to +/-11% should be treated with some caution.
- 2.19 The two-year average of the participating MNCs' calculated effective tax rates increases from 23% under scenario 1 to 29% under scenario 2 and 31% under scenario 3.
- 2.20 The following chart shows the average, maximum and minimum of the effective tax rates calculated for each MNC in the sample. The wider range in year 2 is owed in part to the effect of cross-border loss offsetting. The average trend over two years is very similar to that calculated below using the aggregate of the sample.

Figure 10 Average calculated effective cash tax rate, by MNC

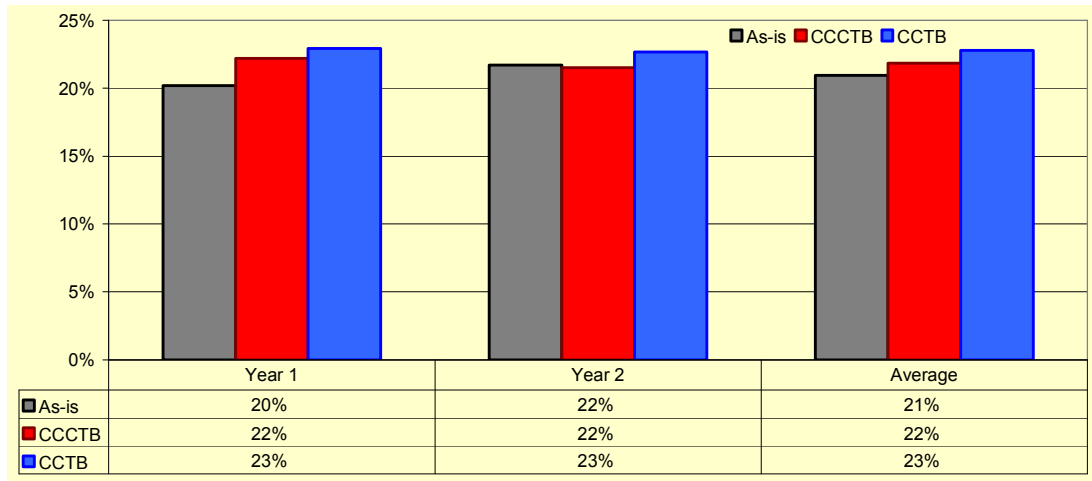


Effective tax rate	Average	Max	Min
Year 1			
As-is	23%	63%	0%
CCCTB	28%	55%	5%
CCTB	30%	56%	5%
Year 2			
As-is	22%	86%	(19%)
CCCTB	30%	85%	(5%)
CCTB	33%	123%	(14%)
Average over 2 years			
As-is	23%	74%	(9%)
CCCTB	29%	70%	0%
CCTB	31%	89%	(5%)

2.21 The effective tax rate may also be calculated as the total tax charge of the sample divided by the total EBT. Year 2 shows the impact of cross-border loss offsetting, resulting in a lower effective tax rate (see Figure 11 below).

2.22 Figure 11 The differences between scenarios 1, 2 and 3 are directly related to the differences in cash tax charge (see above for more details).

Figure 11 Effective cash tax rate calculated from aggregate of sample



- 2.23 Figure 11 show differing trends in year 2. This is due to the different methods of calculation; Figure 10 is independent of the size of the MNC.
- 2.24 Figure 11 is weighted towards larger MNCs. Within the sample, larger MNCs benefit disproportionately from cross-border loss compensation, which gives an ETR that is lower for CCCTB than under the as-is scenario.
- 2.25 In addition, apparent from the year two data, the effect of a significant loss in one company in one Member State reduced the increase in CCCTB overall tax base and effective cash tax rate as compared with the tax base and effective cash tax rate under current national tax systems
- For the CCTB
- 2.26 The current average tax base of the companies over the two year base period in moving to the CCTB scenario (harmonised corporate tax base but with no cross-border tax consolidation) increased by 11%. The aggregate tax base increased by 3% to €33.0bn. See Figure 1 and Figure 2 above.
- 2.27 The average tax charge increased by 19%. The increase in aggregated tax charge of the companies in the study over the two year base period was 9%, to €11.6bn. The tax charge was thus higher for CCTB than CCCTB under both measurements. See Figure 7 and Figure 8 above.
- 2.28 The principal reason for the CCTB base being approximately 5% higher than the CCCTB base was the effect of the offset between countries of individual MNC country tax losses under CCCTB. See Figure 3 above.
- 2.29 This effect is then countered for the CCCTB at the tax charge level by the formulary apportionment, which, overall, reallocates the lower CCCTB taxable profits to higher tax countries, that is, towards Belgium, Germany, Luxembourg, Spain and the UK and away from France, Ireland and Sweden via their weightings of the 3 factors.
- 2.30 A number of factors contributing to the 11% (Figure 1, average basis) or 3% (Figure 2, aggregate basis) increase in the taxable base over the two years were noted.
- 2.31 They include the absence of any research and development (R&D) tax credit regime under the CCTB (or CCCTB) basis, as compared with regimes being available currently in Austria, Belgium, the Czech Republic, France, Greece, Hungary,

Ireland ,Italy, The Netherlands, Poland, the Slovak Republic , Spain, Sweden and the UK.

- 2.32 In addition, certain Member State reliefs such as the Belgian fictive interest relief on equity are not replicated in the CCCTB or CCTB base.
- 2.33 Few Member States (Denmark, Germany, and (proposed) Sweden and the UK) have an “earnings stripping” or interest cap, such as is envisaged in WP65 and built into the CCCTB/CCTB model (inter-company interest in excess of 30% of EBITDA being disallowed). The amount of interest disallowed in the sample was not however material.
- 2.34 The adjustment from LIFO or base cost to FIFO or weighted average costs envisaged under CCCTB or CCTB is not mandatory in several Member States tax systems albeit LIFO/base cost are often not permitted under local GAAP and are not permitted under IFRS.
- 2.35 The disallowance of 50% of representation costs appears to be, on balance, less generous than in most Member States
- 2.36 On the other hand, the introduction of the participation exemption for dividends (and gains) on shareholdings of 10% or more is more generous than the credit regimes available currently in a number of Member States such as the UK and Ireland.
- 2.37 Moreover, the allowance of 50% of entertaining costs is again more generous than in Member States such as the UK, where only staff entertaining is allowable.
- 2.38 Many arbitrage possibilities between the national tax bases for example in respect of hybrid instruments are not by definition available under the CCCTB or CCTB base.
- 2.39 Furthermore, many of the differences between the national tax bases and the CCTB and therefore (before cross-border loss offsets) CCCTB base are timing differences only e.g. different tax depreciation rates. Further work could be undertaken to extend the coverage to the deferred tax effects of the change to CCCTB or to CCTB, as compared with the deferred tax provisioning under current national GAAP (or IFRS) for national tax systems.

3 Participation and level of data provision

3.1 The number of MNCs participating in this part of the CCCTB study was 13.

3.2 The survey results are considered to be a good cross section of industry in terms of the industry sectors covered (10), the size of business and the number of Member States in which the participating MNCs had taxable operations (19).

3.3 The spread of participants by sector was as follows.

Sector	Number of MNCs
Banks	3
Electricity	2
Food retail	1
Insurance	1
Leisure goods	1
Media & entertainment	1
Oil & gas	1
Pharmaceuticals	1
Technology & hardware	1
Telecommunications	1
Total	13

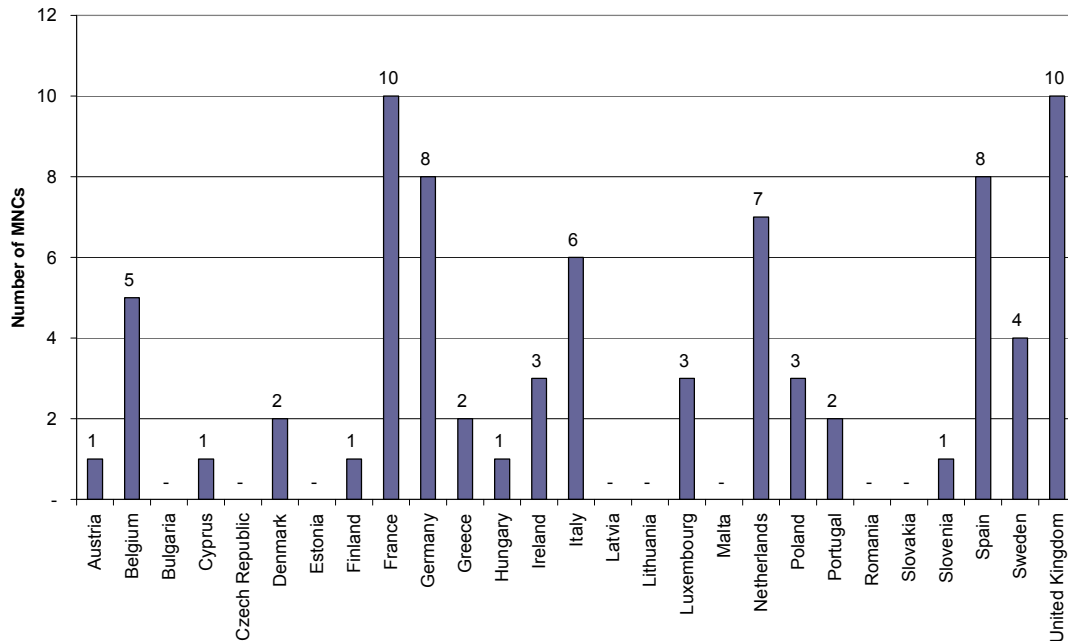
3.4 The spread of participants by location of ultimate parent company was as follows.

Location of ultimate parent	Number of MNCs
Belgium	1
Bermuda	1
France	1
Italy	1
Luxembourg	1
Netherlands	1
UK	5

USA	2
Total	13

3.5 Between them, participants provided data covering entities in a total of 19 countries. Note that to preserve confidentiality, countries with only one respondent are grouped as 'other countries' for the remainder of the report.

Figure 12 Number of MNCs represented in each country within the sample

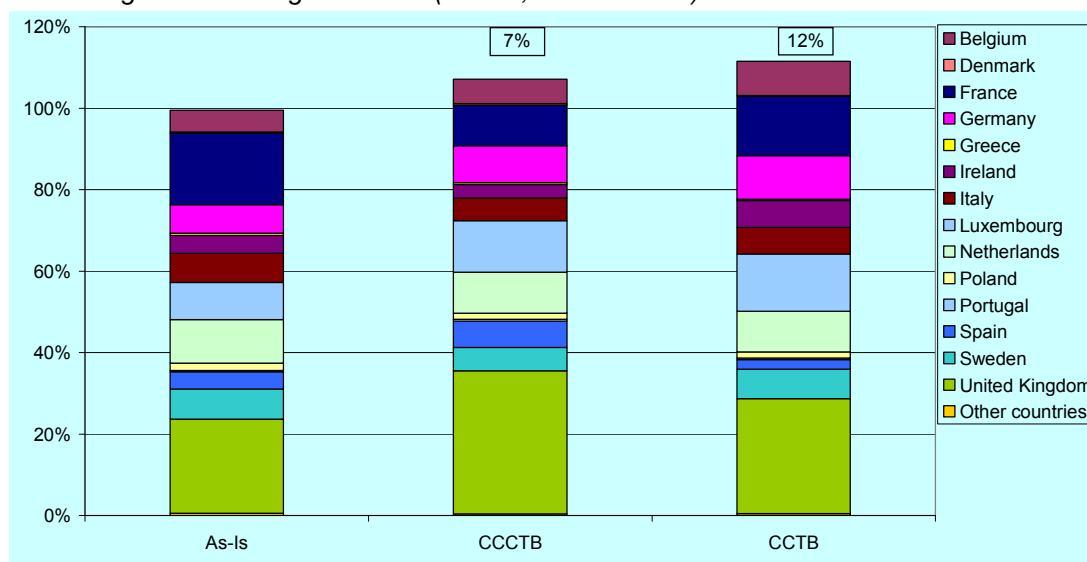


3.6 The survey also covered a good range of MNCs by turnover. The turnover of participants (calculated as the sum of sales for entities for which data was provided) ranged from less than €50m to more than €10bn. Two of the participants had a turnover within +/-50% of the mean; five are within +/-80% of the mean; and twelve are within +/-100% of the mean turnover.

4 Survey Results: Supporting Charts & Tables

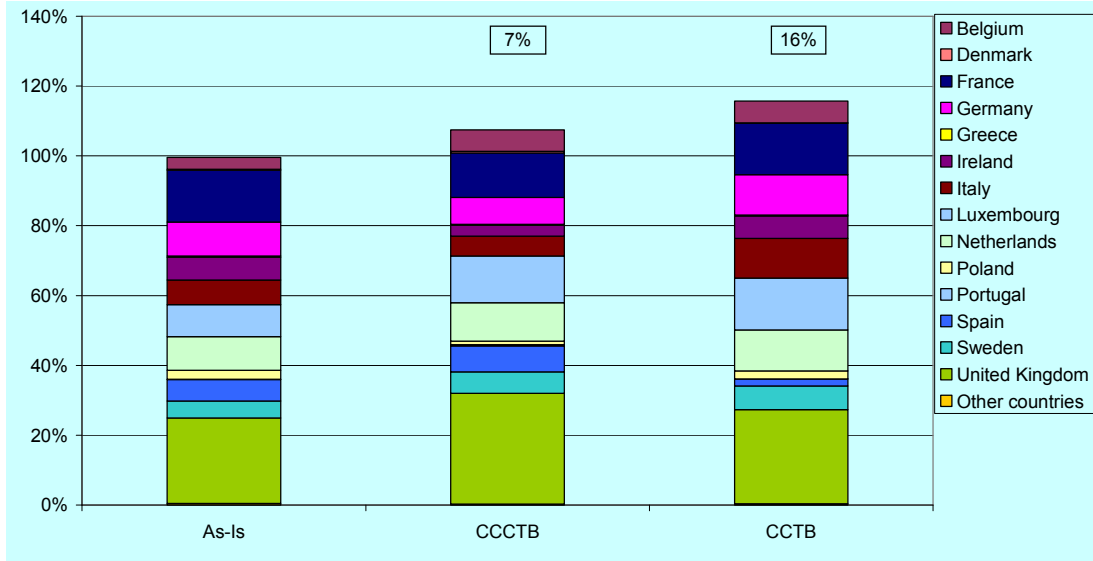
A. Taxable base

Figure 13 Average tax base (Year 1, as-is = 100%)



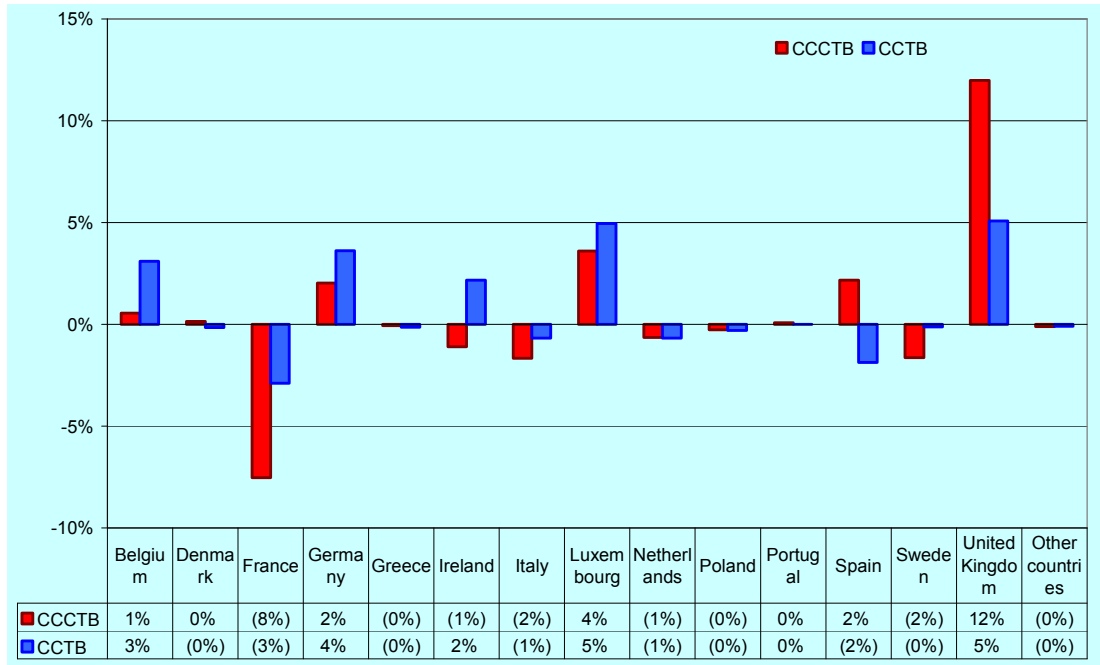
- 4.1 This is the year 1 element of the data supporting Figure 1 (see page 5). In this period, there were some losses to be offset across several of the CCCTB groups, and it can be seen that the CCCTB and CCTB bases have both risen when compared to the as-is situation, but that the CCTB base shows the greater increase.
- 4.2 In some countries, such as Italy, the higher CCCTB 75% shareholding threshold for consolidation means that subsidiaries owned as to 50.1% or more but less than 75% cannot form part of the CCCTB consolidation. Accordingly, were such a 50.1% Italian subsidiary to have tax losses, the introduction of the CCCTB may cause issues to arise in relation to the inability to offset the share of CCCTB profit allocated to an Italian 75% or more subsidiary against losses in a 50.1% owned Italian subsidiary, or at least to decelerate or possibly accelerate the rate of utilisation of such losses where Italian tax consolidation were to be permitted between the 50.1% and 75% Italian subsidiaries, notwithstanding that the latter has opted into CCCTB. This was an issue for one participant in the sample – although for the purposes of data gathering this effect was removed as for subsequent periods 100% ownership was achieved.

Figure 14 Average tax base (Year 2, as-is = 100%)



- 4.3 This is the year 2 element of the data supporting Figure 1 (see page 5). In this period, a major tax loss was allocated across a CCCTB group and it can be seen that the difference between CCCTB and CCTB bases is considerably greater than in year 1, as the loss is offset.
- 4.4 In year 2 the CCTB base appears to increase when compared to the as-is situation by a larger proportion than in year 1. This may be due to the adjustments between as-is and CCTB base changing between years 1 and 2 and/or the change in the earnings before tax of the participants (compare Figure 17 and Figure 18 for the increase in the aggregate tax base in year 2).

Figure 15 Change in average tax base - percentage points up or down (year 1, as-is=100%)

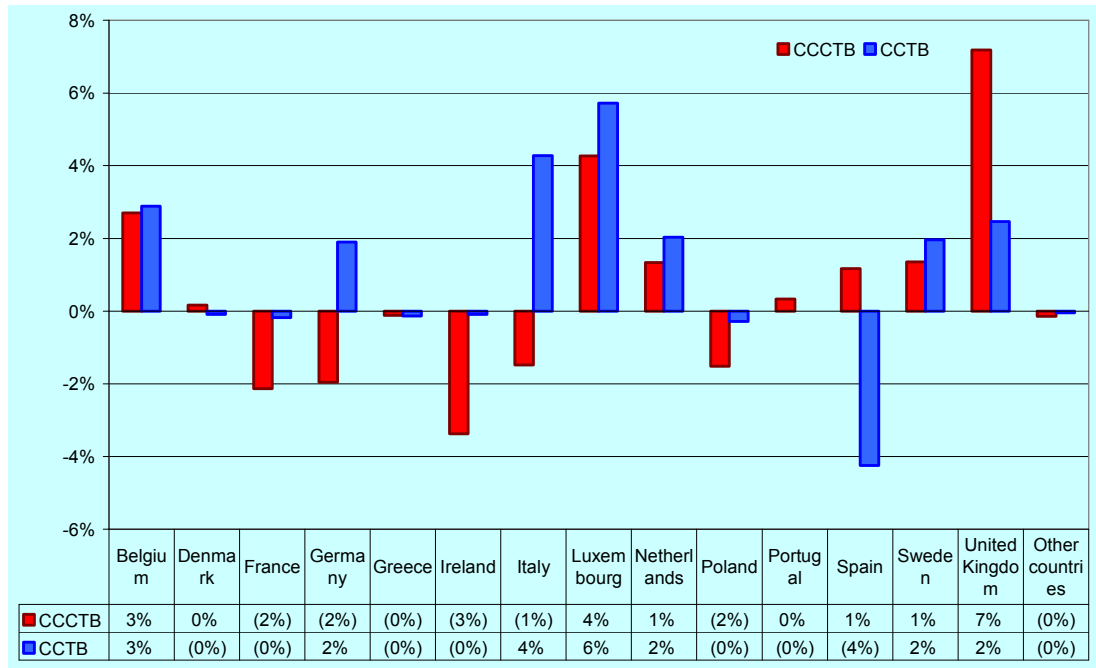


- 4.5 This graph presents the year 1 data supporting Figure 4 (see page 7). It shows how for most countries the change in the average distribution of the tax base under both CCCTB and CCTB is within the margins of error in the data. This is in a year with fewer tax losses than in year 2. The only exceptions to this are the apparent re-

distribution of the tax base away from France and towards the UK under CCCTB. This is clearly due to the apportionment mechanism, as under CCTB the effect is much less pronounced. The apparent strength of the UK under CCCTB is discussed in more detail elsewhere in this report.

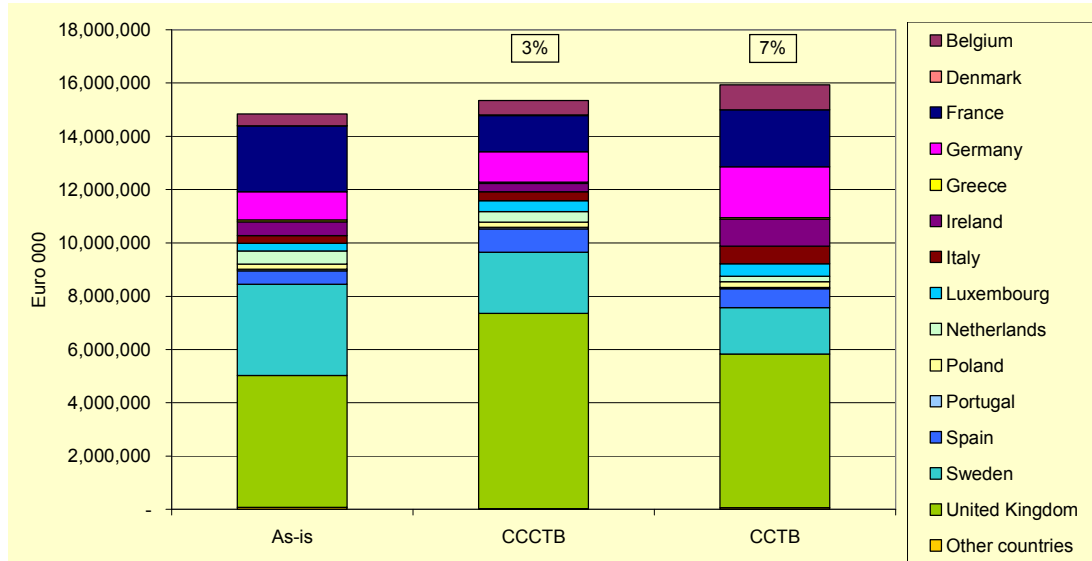
- 4.6 Under CCTB there are no strong movements, although it might be concluded that France again loses out, with the UK again the strongest, but with Luxembourg and Germany also benefitting. However, this is a result that is on the margins of statistical relevance.

Figure 16 Change in average tax base - percentage points up or down (year 2, as-is=100%)



- 4.7 This graph presents the year 2 data supporting Figure 4 (see page 7). This is a year with a major tax loss, and this is reflected in the fall in tax base in many countries under CCCTB compared to year 1. We consider that any movements with less than a 2% swing should be treated with particular caution. The UK still gains tax base under CCCTB, but to a lesser extent than in year 1. Under CCTB, Italy and Luxembourg see the biggest increase in its tax base, whilst Spain sees the largest fall.

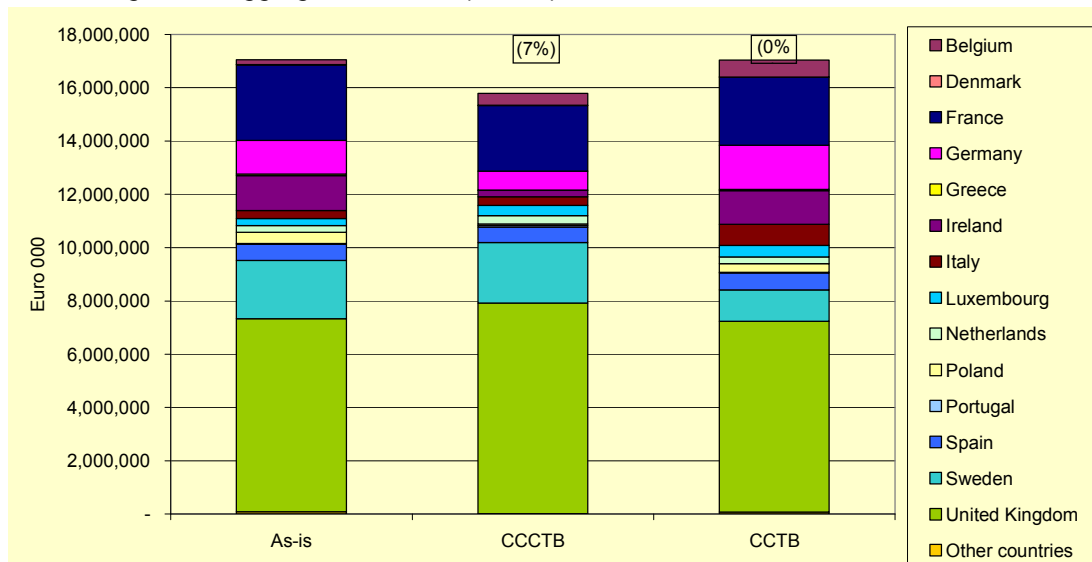
Figure 17 Aggregate tax base (Year 1)



4.8 The above shows the aggregate tax base for Year 1, in which no major tax losses are made. It demonstrates that the CCCTB and CCTB taxable bases are again greater than the as-is situation, consistent with the average approach shown in Figure 13 (see page 17). The total over 2 years is shown in Figure 2 (see page 5)

4.9 It is possible that the increase in the tax base for CCCTB arises from less efficient use of brought forward losses, as the brought forward losses can only be used to reduce the local apportionment of taxable profits. At least one MNC clearly demonstrated this effect. Note also that losses can be used less effectively under CCCTB as an element of them can be in essence exported from high-tax rate countries to low-tax rate countries through the mechanism of the CCCTB pool.

Figure 18 Aggregate tax base (Year 2)

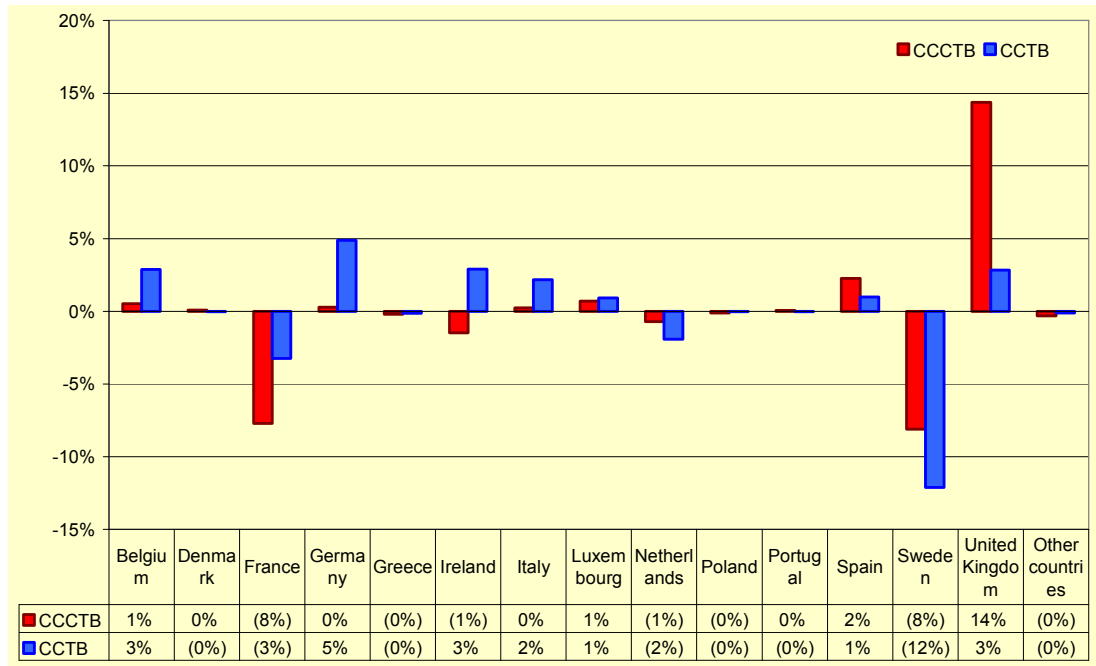


4.10 We present the same analysis for the Year 2 element of the data presented in Figure 2 (see page 5). Here, a significant tax loss is made, which at the group CCCTB level is then set off against profits made in the rest of the group. The effect of the group relief is clearly seen, and acts to measurably reduce the aggregate of the taxable profits in the CCCTB group, to below even the as-is situation. This effect is more marked in this aggregate approach than compared to Figure 14, which analyses the

impact on the average tax base (see page 18), because the loss significantly affected one of the larger MNCs, whose results are emphasised through this approach.

4.11 We note also that in Year 2, there is no increase in taxable profits for CCTB in contrast to Year 1. There is no particular reason that we are aware of for this, and demonstrates that the numbers will naturally vary from year to year. Within the bounds of statistical likelihood, therefore, the aggregate CCTB tax base can again be a slight increase relative to the as-is situation. Note that this is apparently a much less significant movement than that seen in Figure 14, which shows the average distribution of the tax base increasing in year 2. From this we might conclude that very large MNCs are more likely to see a reduction in their tax base under CCTB / CCCTB, whilst an “average” MNC is more likely to see an increase.

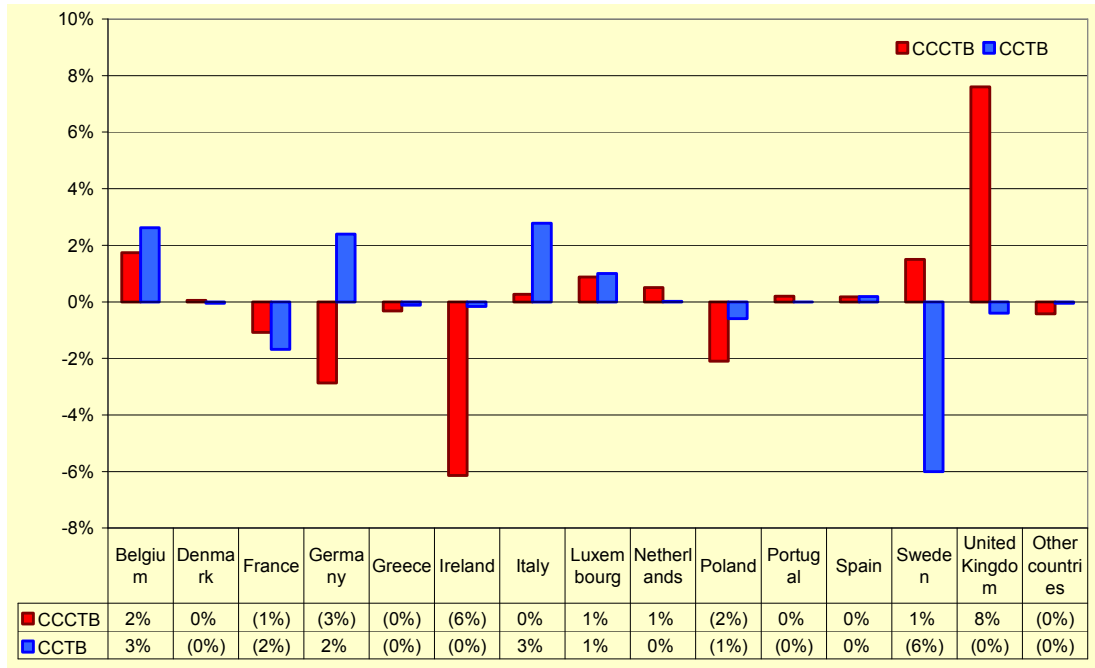
Figure 19 Change in percentage share of aggregate tax base - percentage points up or down (year 1)



4.12 This is the year 1 element of the data presented in Figure 21, being the change in the aggregate tax base presented in Figure 2 (see page 5). In many ways it mirrors the effects seen in Figure 15, which looks at the change in the average tax base (see page 18), whereby without a significant loss, the effect of both CCCTB and CCTB on the size of the aggregate tax base is insignificant for most countries. The only exceptions are the significant loss of tax base in France and in this instance Sweden, and the significant gain in the UK. For the UK and France, the swings in this aggregate view are consistent with that seen from the average view, whilst the fall in Sweden appears here to be related to one or more of the larger MNCs.

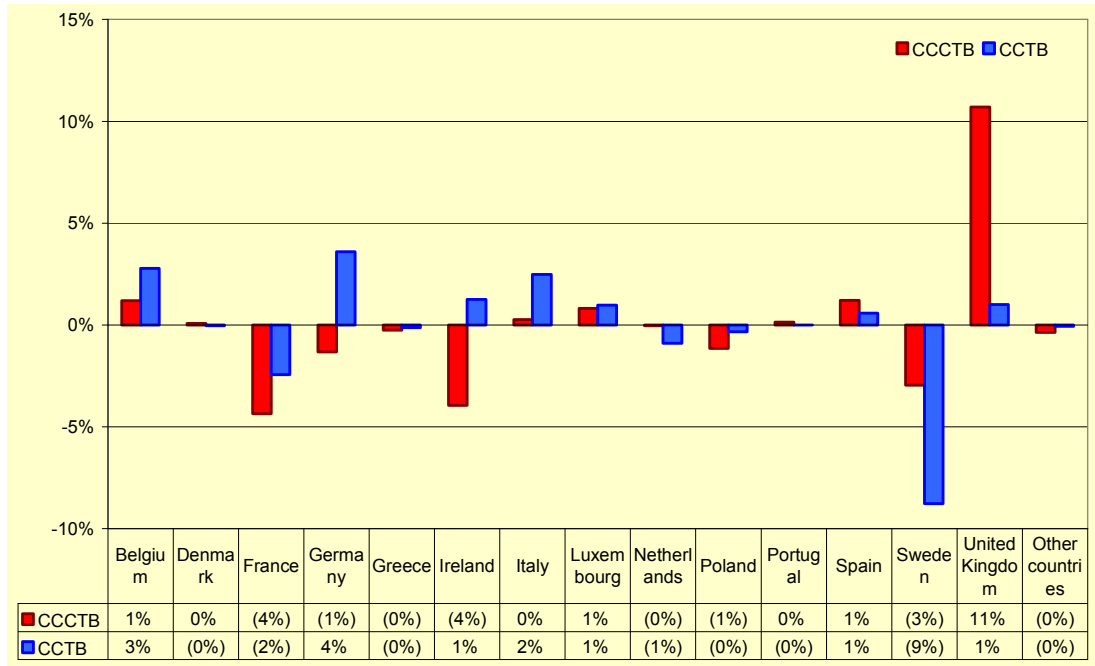
4.13 Under CCTB, Sweden also loses a significant amount of tax base, whilst Germany gains a more significant amount from this aggregate approach. The results for other countries are on the margins of statistical relevance.

Figure 20 Change in percentage share of aggregate tax base - percentage points up or down (year 2)



- 4.14 This is the year 2 element of the data presented in Figure 21, being the change in the aggregate tax base presented in Figure 2 (see page 5). It presents a slightly different picture to that shown by the average approach in Figure 16 (see page 19). Under CCCTB, the UK still gains the most tax base, whilst this time Ireland, Germany and Poland lose an element of their tax base, with all the other countries being, effectively, unaffected. At first sight this appears an apparently contradictory result, as the fall in tax base under CCCTB is much larger in the aggregate approach than that seen based on the percentage distribution of the tax base in each country. It can perhaps be explained by considering the relative size of the MNCs making up the sample, and how the largest MNCs are located in the largest economies. Hence the 3% fall in the German tax base above represents a significant proportion of the overall tax base.
- 4.15 Under CCTB, there are no significant gains made, with the increases seen in Belgium, Germany and Italy barely above the margins of statistical reliability. Consistent with year 1, Sweden sees by far the biggest loss of tax base, in an apparently contradictory result to that seen in Figure 16 (see page 19). This result clearly demonstrates the effect of the large MNCs dominating the aggregate numbers.

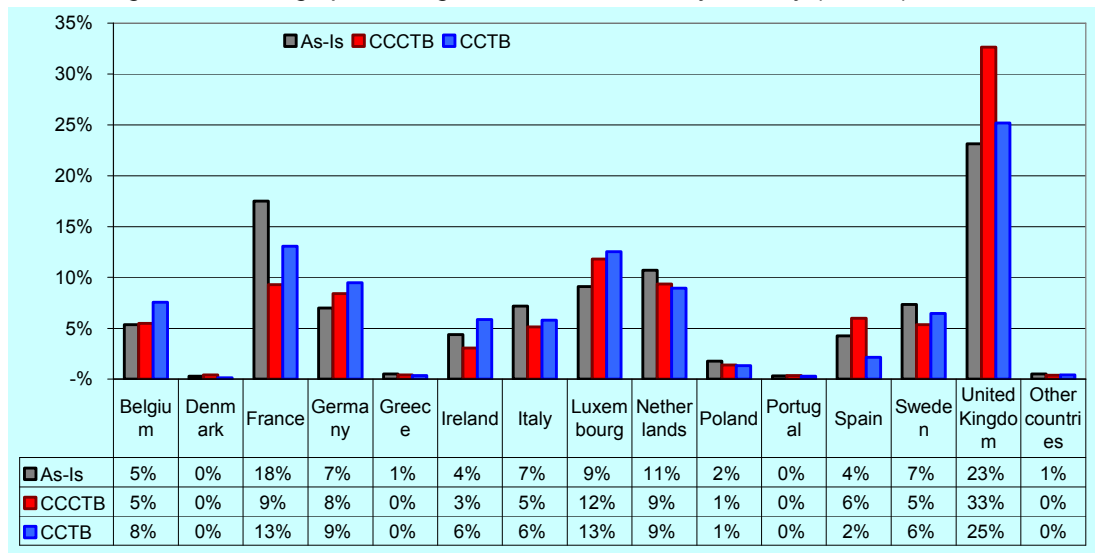
Figure 21 Change in percentage share of aggregate tax base - percentage points up or down (average over 2 years)



4.16 This is the change in the aggregate tax base presented in Figure 2 (see page 5), being the average of the figures presented in Figure 19 and Figure 20 above. The combined data is best understood by considering the individual years, above. In broad terms, on average, France, Germany, Ireland and Poland lose aggregate tax base under CCCTB, whilst the UK gains strongly.

4.17 Under CCTB, the countries that gain the most tax base are Belgium, Germany and Italy, although this result should be treated with caution given the fairly low value of the movement. Sweden is the main loser of tax base under CCTB over the 2 years, showing the effect of the larger MNCs dominating the aggregate sample.

Figure 22 Average percentage share of tax base by country (Year 1)

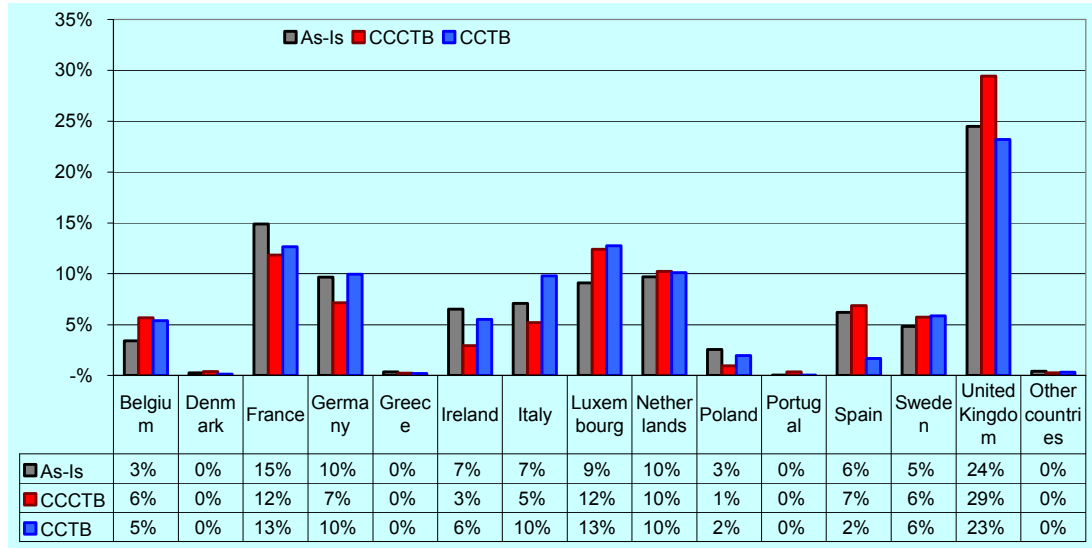


4.18 This is the year 1 data element of the two-year average shown in Figure 24. It is the same data as that presented in Figure 13 (see page 17), but presented as the share of tax base by country, that is, the 'share of the cake'. Thus the data for each scenario sums to 100%, regardless of any changes in the overall size of the tax base. The

movements themselves are presented separately in Figure 15 (see page 18), whereas here they are presented in the context of the original percentage share of tax base by country.

- 4.19 As can be seen, for most countries the movements are insignificant for CCCTB, but with France seen to lose approximately half of its share of tax base, whilst the UK share increases by about one-third. Under CCTB, the relative loss of tax base by France, the largest overall loss from Figure 15 (see page 18), can be seen here to be not a significant share of the French slice of the overall tax base.

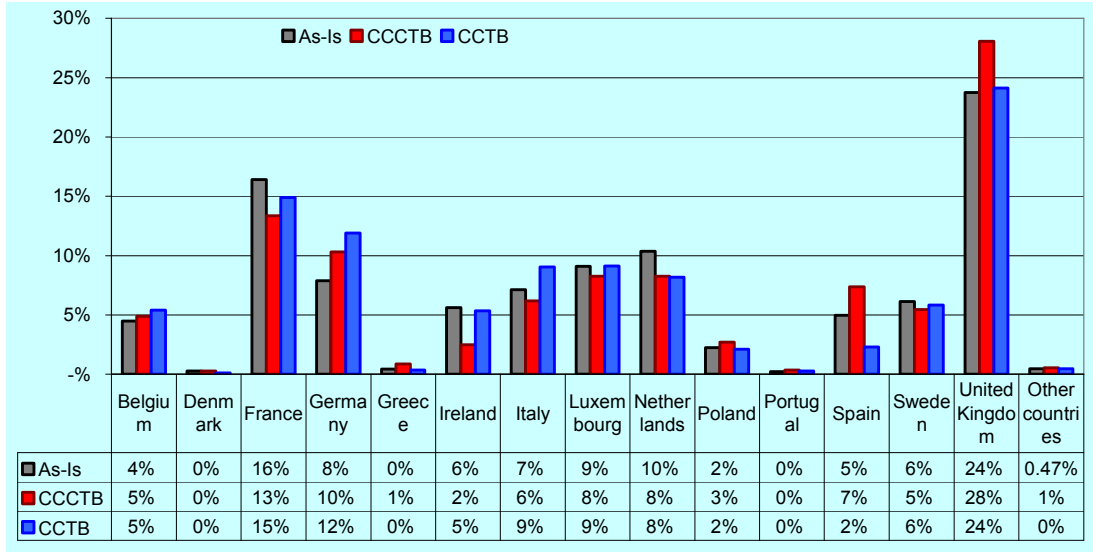
Figure 23 Average percentage share of tax base by country (Year 2)



- 4.20 This is the year 2 data element of the two-year average shown in Figure 24. It is the same data as that presented in Figure 14 (see page 18), but again in this representation it is easier to see the comparative movements in individual countries. The data is presented as the share of tax base by country, that is, the 'share of the cake'. Thus the data for each scenario sums to 100%, regardless of any changes in the overall size of the tax base. The movements themselves are presented separately in Figure 16 (see page 19), whereas here they are presented in the context of the original percentage share of tax base by country.

- 4.21 As can be seen, for most countries the movements are insignificant for CCCTB, but with the Belgian share of tax base nearly doubling, and the UK share growing by about 20% in comparison to the as-is situation. Also, Ireland appears to lose approximately half of its share of tax base, but this is a result close to the limits of statistical reliability. Under CCTB, this graph shows that loss of tax base by Spain, the largest overall loss from Figure 16 (see page 19), constitutes about 70% of its as-is tax base share. However the absolute change is still relatively small, and again close to the limits of statistical relevance.

Figure 24 Average percentage share of tax base by country (average over 2 years)

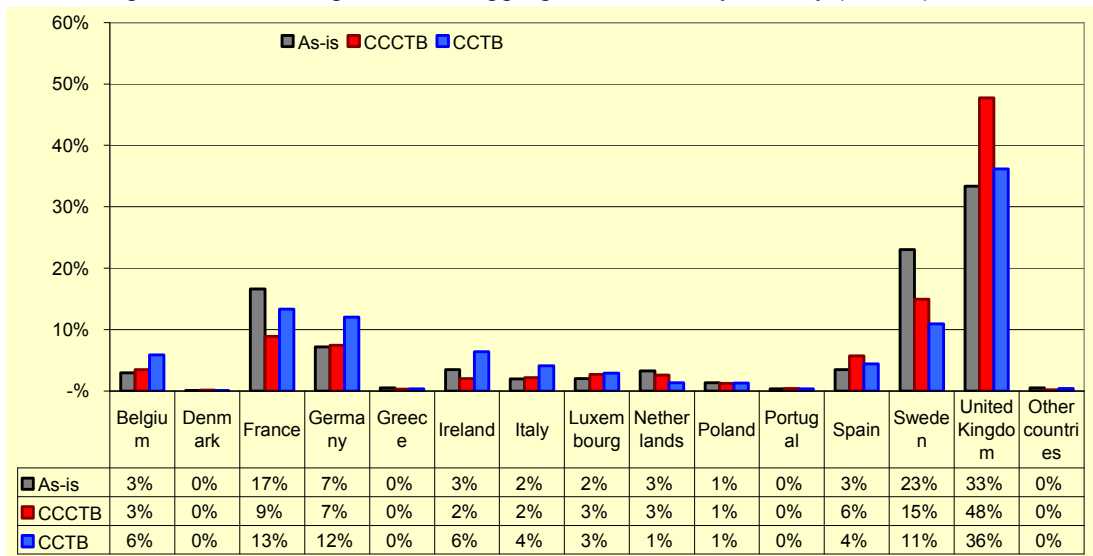


4.22 This is the average over two years of the data presented in Figure 22 and Figure 23. It is the same data as that presented in Figure 1 (see page 5), but again in this representation it is easier to see the comparative movements in individual countries. The movements themselves are presented separately in Figure 4 (see page 7), whereas here they are presented in the context of the original percentage share of tax base by country.

4.23 As can be seen, for most countries the movements are insignificant for CCCTB. The biggest fall from Figure 4 (see page 7) is in the French share of tax base, which appears to be shrinking by about a quarter under CCCTB, whilst the largest growth country, the UK, sees its share growing by about 30% in comparison to the as-is situation.

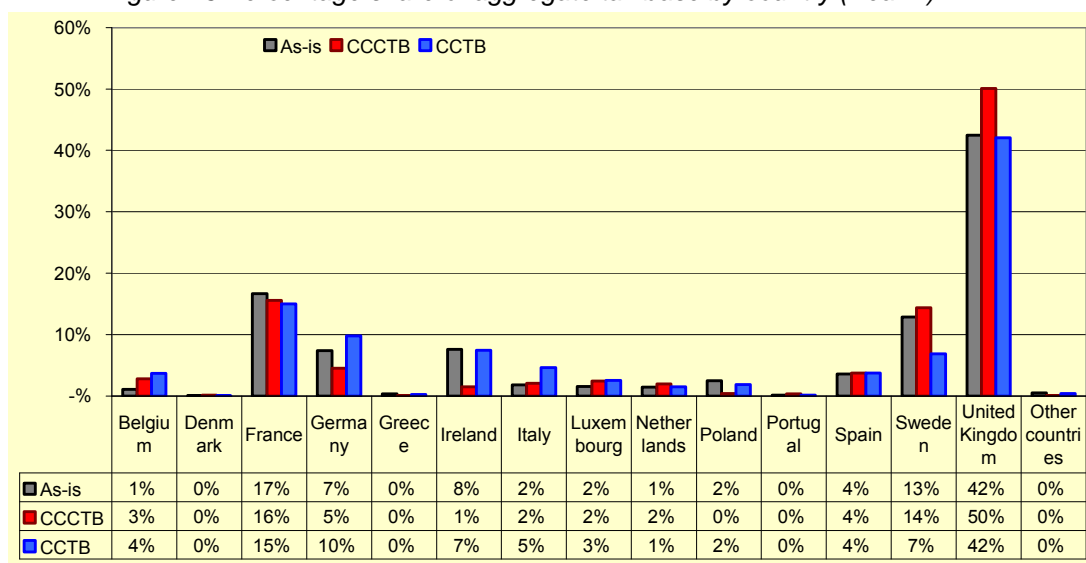
4.24 This graph shows that the slight movements in the base under CCTB, if they can be considered statistically significant with movements rarely exceeding 2%, are relatively insignificant compared to the relative size of the base in each country, with the exception of Spain, reflecting its year 2 results shown in Figure 16 (see page 19).

Figure 25 Percentage share of aggregate tax base by country (Year 1)



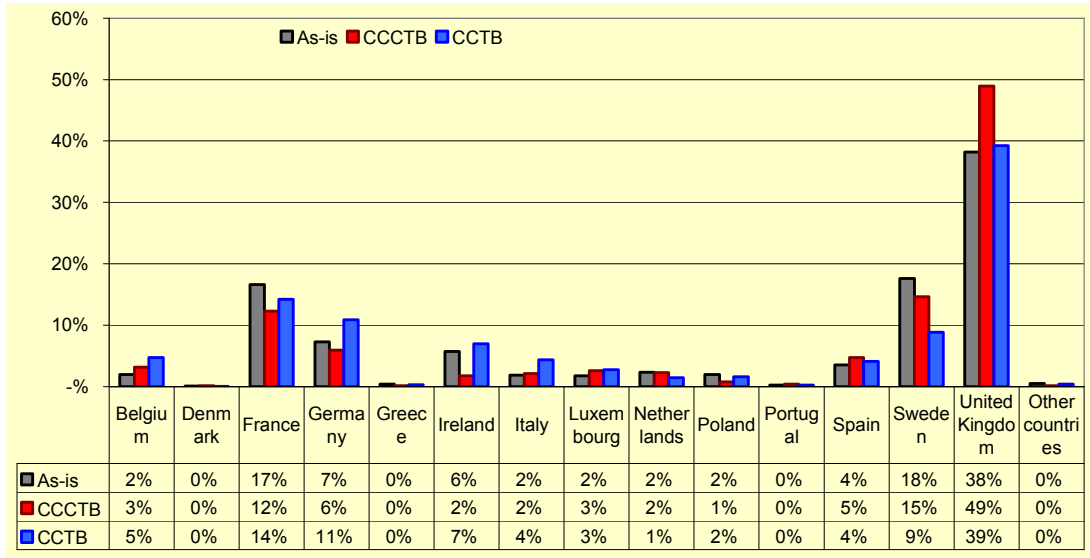
- 4.25 This is the aggregate equivalent of Figure 19 (see page 21), showing the percentage distribution of the data presented in (see page 20), in a way to see the relative movements between the as-is, CCCTB and CCTB scenarios for each country. The movements themselves are shown in Figure 19 (see page 21), whereas here they are presented in the context of the original percentage share of tax base by country.
- 4.26 The biggest falls in tax base, seen by France and Sweden in Figure 19, are here shown to represent almost half of France's share of the tax base, but just a third of the Swedish. The biggest gain, enjoyed by the UK, represents a roughly 40% increase in its share of the tax base.
- 4.27 Under CCTB, the reduction in tax base in Sweden is seen to represent approximately 45% of its share of tax base, whilst the fall in France is barely 20% of its share.

Figure 26 Percentage share of aggregate tax base by country (Year 2)



- 4.28 This is the aggregate equivalent of Figure 20 (see page 22), showing the percentage distribution of the data presented in Figure 18 (see page 20), in a way to see the relative movements between the as-is, CCCTB and CCTB scenarios for each country. The movements themselves are shown in Figure 20 whereas here they are presented in the context of the original percentage share of tax base by country.
- 4.29 The most significant loss of tax base under CCCTB here is seen to occur in Ireland, with Germany also seeing a significant fall.
- 4.30 Under CCTB, the loss in Sweden would appear to account for approximately half of the Swedish share of tax base.

Figure 27 Percentage share of aggregate tax base by country (average over 2 years)

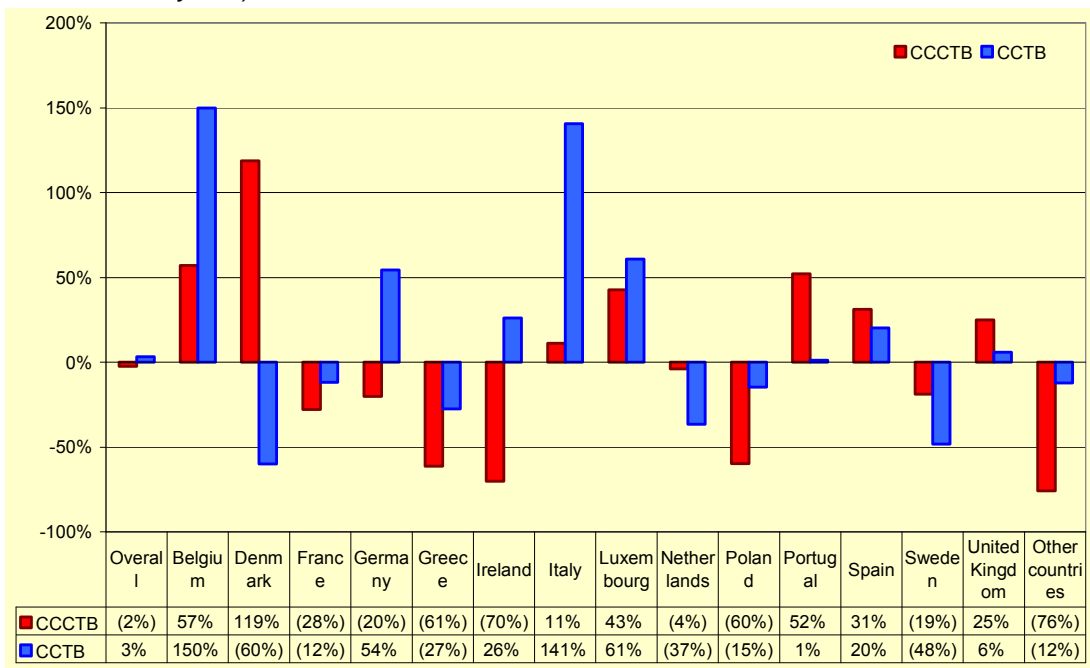


4.31 This is the aggregate equivalent of Figure 21, showing the percentage distribution of the data presented in Figure 2, in order to show the relative movements between the as-is, CCCTB and CCTB scenarios for each country. The movements themselves are shown in Figure 5, but the percentage share is presented here in the context of the original aggregate distribution.

4.32 This average over 2 years is best understood by inspection of the annual data sets in Figure 25 and Figure 26. Overall, under CCCTB, the UK is a significant winner, and then Ireland, in terms of proportion of its original share of tax base, sees the most significant loss.

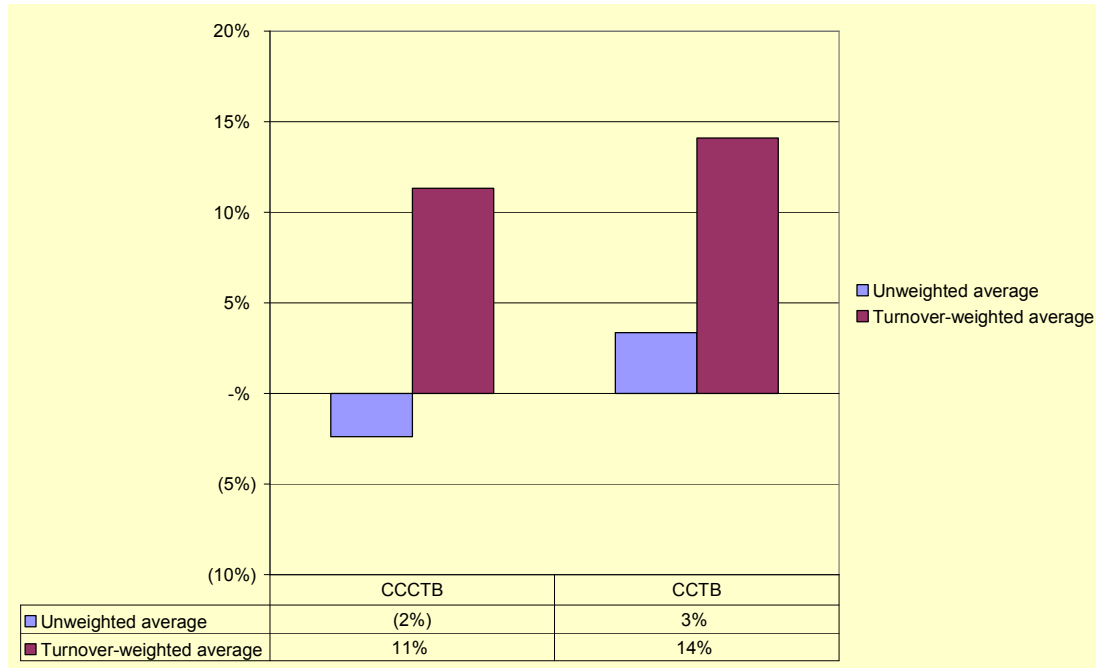
4.33 Under CCTB, Sweden is seen to lose approximately 50% of its share of tax base, whilst Germany's share grows by a similar amount and Italy's more than doubles, albeit this is statistically unreliable.

Figure 28 Change in aggregate tax base as percentage of as-is tax base (average over 2 years)



4.34 This graph presents the change in the size of the tax base expressed as a percentage of the As-Is tax base, averaged over 2 years. In this it differs from Figure 21, which instead shows the change in percentage share of tax base (for example, if a given country had on average 12% of the as-is tax base, but 10% of the tax base under CCCTB, the figure shown for CCCTB would be -2%). The result in this chart should be treated with some caution, and certainly not extrapolated for the likely effect in each individual country. The percentage movement can appear overly large when the As-Is base for a country is small (for example because it includes only a small sample of MNCs). We prefer the absolute movement as a better measure of the likely effect in each country, and present this elsewhere in the report.

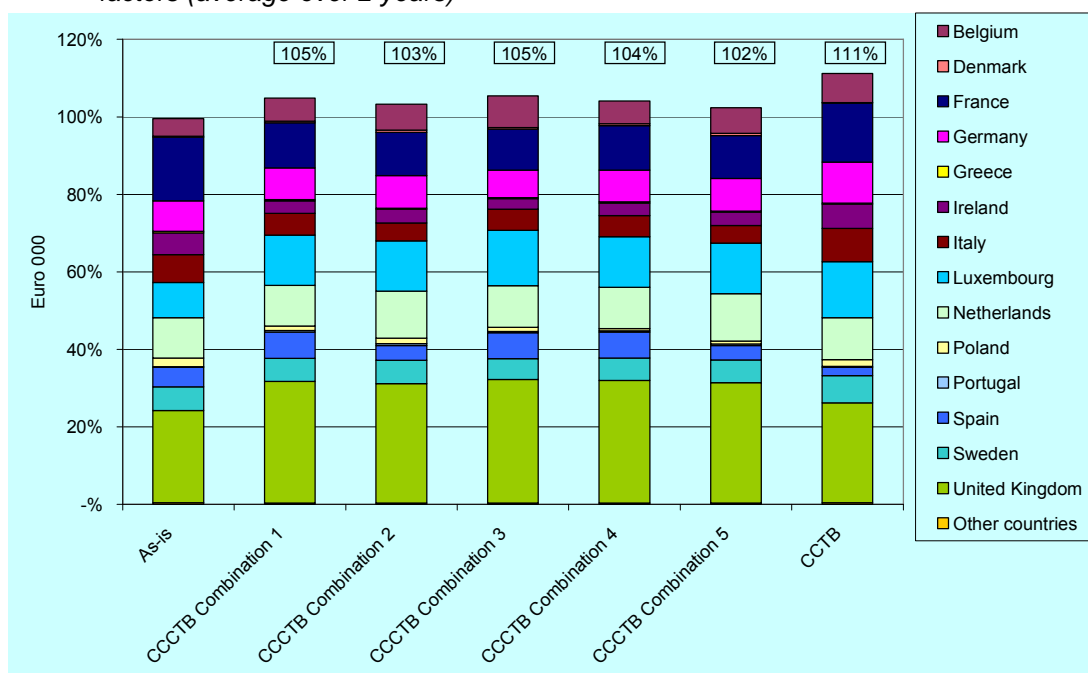
Figure 29 Change in average tax base per MNC (average over 2 years)



4.35 The first column in this graph simply shows the movement in the aggregate tax base compared to the As-Is case over two years, when excluding the tax losses from the taxable profit total (see elsewhere for a discussion about this treatment).

4.36 The second column for each scenario shows the same analysis when each MNC's tax base is weighted according to its turnover (derived from the sales apportionment factor). Logically we question the validity of this calculation, as, by definition, the size of each MNC's tax base is already likely to reflect the size of its turnover, and therefore weighting it in this way simply doubly compounds the effect of the different sizes of the MNCs. The resultant apparent increase in the size of the tax base is, unsurprisingly, inconsistent with any other findings in this report.

Figure 30 Average tax base under different weighting of CCCTB apportionment factors (average over 2 years)



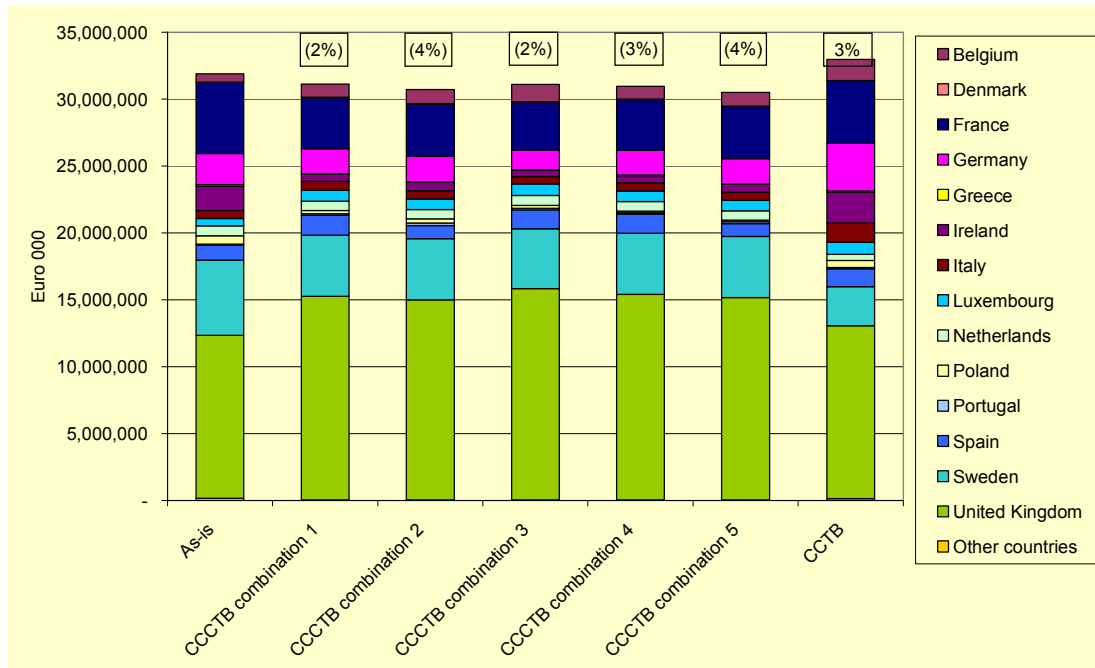
4.37 This graph illustrates the effect of different balances of the CCCTB apportionment weighting factors on the tax base, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

4.38 It represents the practical application of changing the weighting of the apportionment factors shown in Figure 6, and illustrates how, given the relatively even distribution of the factors, changing the weighting has little effect on the relative apportionment of the tax base between countries.

4.39 One effect that may be noticed is the apparent change in size of the average tax base between the different combinations. The difference is due to different local brought-forward (i.e. pre-CCCTB) loss utilisation, which varies according to the amount of profits available in a country to offset those losses against. Therefore one combination of apportionment factors may produce more efficient brought-forward loss utilisation than another, leading to slight movements in the overall tax base.

Figure 31 Aggregate tax base under different weighting of CCCTB apportionment factors (average over 2 years)



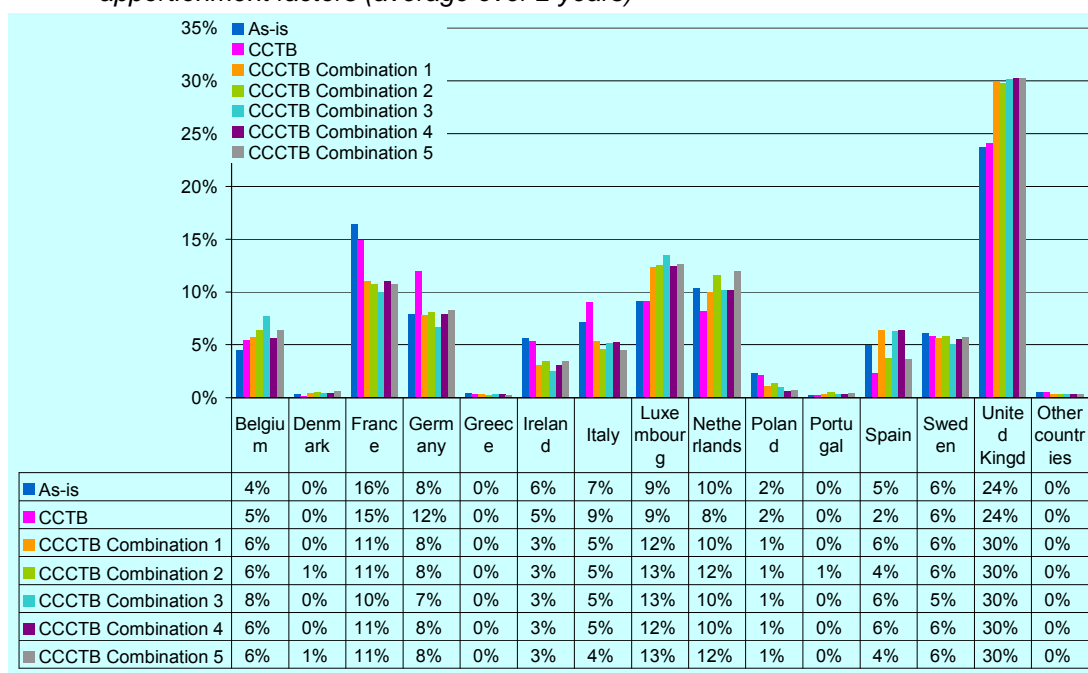
4.40 This graph illustrates the effect of different balances of the CCCTB apportionment weighting factors on the tax base, where:

- Combination 1 uses $\frac{1}{6}$ 'Number of employees' + $\frac{1}{6}$ 'Cost of employees' + $\frac{1}{3}$ 'Assets' + $\frac{1}{3}$ 'Sales by destination';
- Combination 2 uses $\frac{1}{4}$ 'Number of employees' + $\frac{1}{4}$ 'Cost of employees' + $\frac{1}{2}$ 'Assets';
- Combination 3 uses $\frac{1}{6}$ 'Number of employees' + $\frac{1}{6}$ 'Cost of employees' + $\frac{1}{3}$ 'Assets' + $\frac{1}{3}$ 'Sales by origin';
- Combination 4 uses $\frac{1}{3}$ 'Cost of employees' + $\frac{1}{3}$ 'Assets' + $\frac{1}{3}$ 'Sales by destination'; and
- Combination 5 uses $\frac{1}{2}$ 'Cost of employees' + $\frac{1}{2}$ 'Assets'.

4.41 As might be expected from Figure 6, which illustrates how the factors each have a very similar distribution between countries, varying the balance of the weighting factors has relatively little impact on the relative apportionment of the aggregate tax base.

4.42 A similar effect to that noted in 4.39 is visible here; different apportionment factors result in a more or less efficient usage of brought-forward losses, and hence a slightly different overall tax base.

Figure 32 Average share of tax base by country under different weighting of CCCTB apportionment factors (average over 2 years)

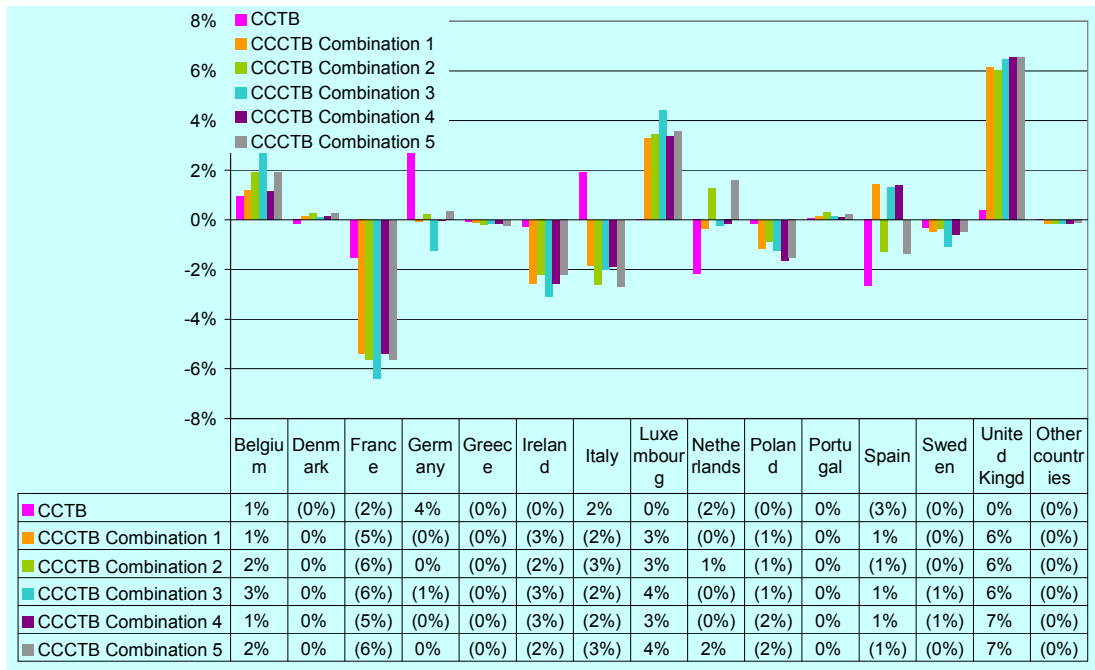


4.43 This graph presents the same data as that shown in Figure 30. It illustrates the effect of different balances of the CCCTB apportionment weighting factors on the tax base, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

4.44 This presentation highlights the differences between the different combinations for the individual countries. These movements are further illustrated in Figure 33 below.

Figure 33 Change in average share of tax base under different weighting of CCCTB apportionment factors (average over 2 years)

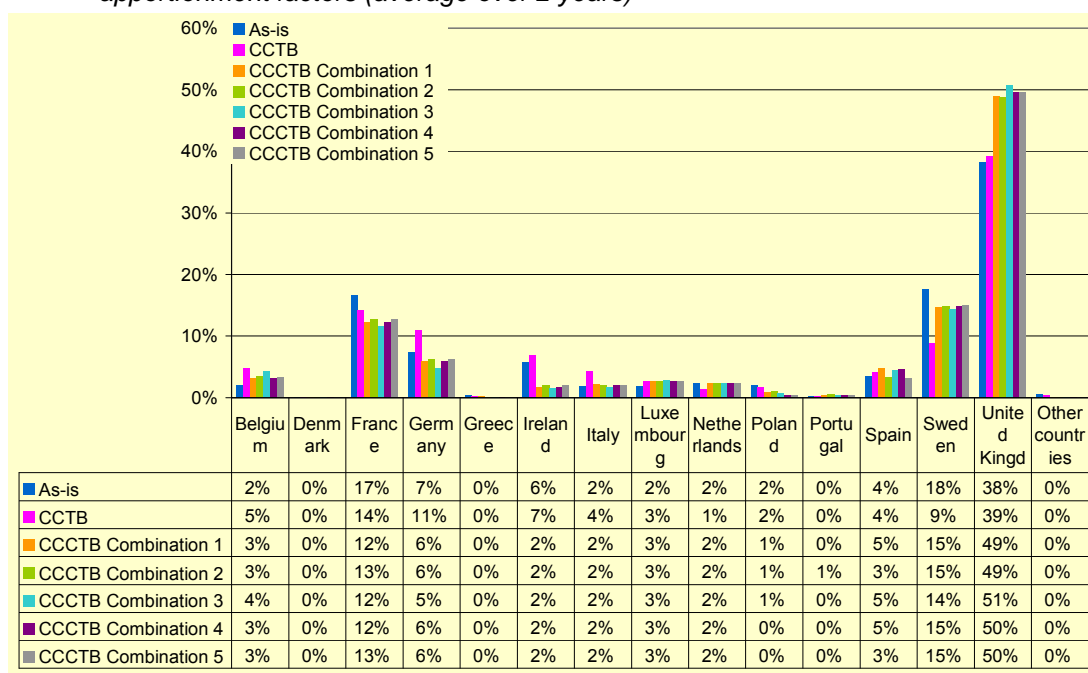


4.45 This graph shows the movement compared to the as-is situation in the tax base under different weighting of the CCCTB apportionment weighting factors on the tax base. It is based on the data shown in Figure 32, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

4.46 The difference between different combinations reflects the relatively even spread of the apportionment factors shown in Figure 6.

Figure 34 Share of aggregate tax base under different weighting of CCCTB apportionment factors (average over 2 years)

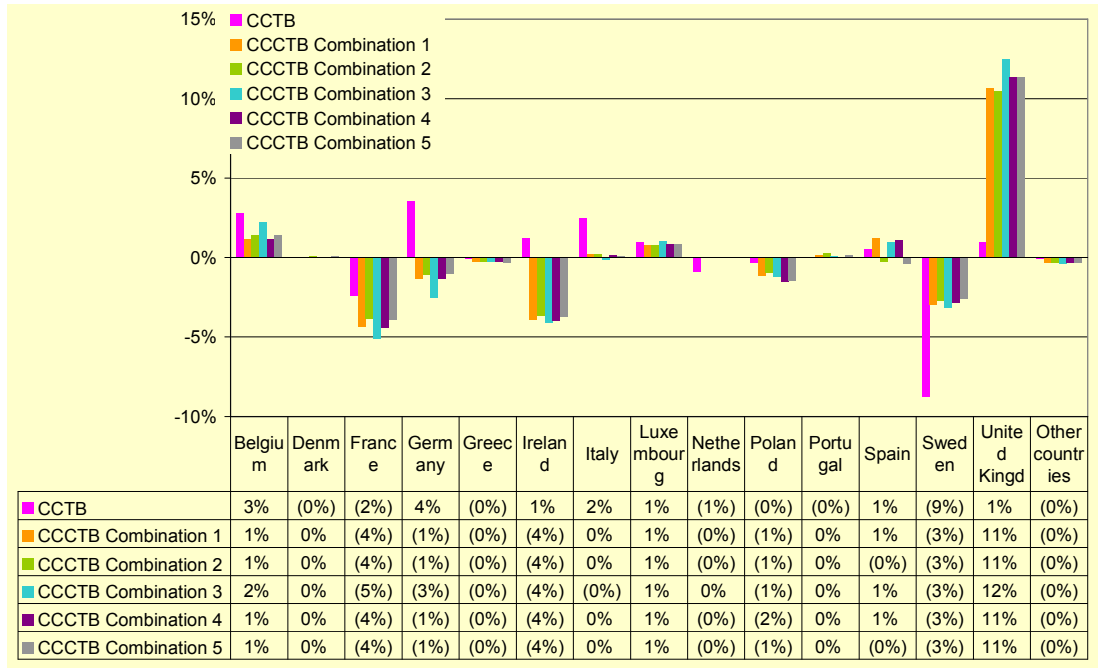


4.47 This graph illustrates the effect of different weightings of the CCCTB apportionment factors on the tax base, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

4.48 It is the same data as that presented in columnar format in Figure 31. This presentation highlights the differences between the different combinations for the individual countries. These movements are further illustrated in Figure 35 below.

Figure 35 Change in share of aggregate tax base by country under different weighting of CCCTB apportionment factors (average over 2 years)



4.49 This graph shows the movement compared to the as-is situation in the tax base under different weighting of the CCCTB apportionment weighting factors on the tax base. It is based on the data shown in Figure 34, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

4.50 The point that this graph illustrates is how similar the distribution is under the different combinations, consistent with the relatively similar distribution of the different apportionment factors across the countries in the study shown in Figure 6.

Figure 36 Taxable base – aggregate of sample (part 1)

€ millions	As-is tax base			CCCTB - combination 1			CCTB		
	Year 1	Year 2	Total	Year 1	Year 2	Total	Year 1	Year 2	Total
Belgium	441.3	183.7	625.0	536.7	445.3	982.0	932.3	630.0	1,562.2
Denmark	7.3	10.6	17.8	20.8	18.1	39.0	3.4	3.7	7.1
France	2,464.4	2,839.2	5,303.6	1,366.6	2,457.6	3,824.2	2,127.3	2,550.4	4,677.7
Germany	1,063.0	1,259.6	2,322.6	1,142.0	713.8	1,855.8	1,918.0	1,667.1	3,585.1
Greece	72.3	61.2	133.5	46.1	5.8	51.9	55.4	41.5	97.0
Ireland	513.3	1,300.9	1,814.1	305.0	236.0	541.0	1,014.6	1,272.1	2,286.7
Italy	289.3	309.0	598.3	335.4	329.4	664.9	655.8	783.4	1,439.2
Luxembourg	296.9	262.8	559.7	416.2	382.2	798.4	466.2	433.7	899.9
Netherlands	484.5	249.8	734.4	394.5	310.7	705.1	213.1	252.7	465.8
Poland	198.0	423.2	621.2	189.7	60.1	249.9	209.1	322.0	531.1

Portugal	55.0	25.8	80.7	67.2	55.7	122.9	56.2	25.5	81.7
Spain	512.3	608.8	1,121.1	877.9	591.6	1,469.5	707.5	641.5	1,349.0
Sweden	3,419.5	2,195.5	5,615.0	2,292.3	2,268.9	4,561.2	1,742.1	1,171.2	2,913.3
United Kingdom	4,951.7	7,241.2	12,192.8	7,326.3	7,906.2	15,232.5	5,764.8	7,164.8	12,929.6
Other Countries	71.9	81.5	153.4	28.7	8.5	37.1	61.5	73.1	134.6
Total	14,840	17,053	31,893	15,345	15,790	31,135	15,927	17,033	32,960

Figure 37 Taxable base – aggregate of sample (part 2)

€ millions	CCCTB - combination 2			CCCTB - combination 3			CCCTB - combination 4			CCCTB - combination 5		
	Year 1	Year 2	Total	Year 1	Year 2	Total	Year 1	Year 2	Total	Year 1	Year 2	Total
Belgium	568.8	476.9	1,045.7	725.6	586.0	1,311.6	528.7	440.2	968.9	559.2	470.7	1,029.9
Denmark	24.2	20.7	44.8	17.2	15.1	32.4	18.8	17.4	36.1	22.1	20.0	42.1
France	1,397.3	2,525.2	3,922.5	1,228.2	2,353.1	3,581.3	1,362.0	2,425.6	3,787.6	1,391.7	2,490.8	3,882.5
Germany	1,133.9	764.3	1,898.1	920.3	548.8	1,469.1	1,133.6	714.5	1,848.1	1,129.3	769.1	1,898.4
Greece	35.7	4.4	40.1	39.4	5.7	45.2	33.9	5.7	39.6	21.3	4.3	25.5
Ireland	343.6	264.3	607.9	269.7	206.6	476.4	296.6	231.8	528.5	332.7	258.3	591.1
Italy	322.3	315.2	637.5	274.0	267.5	541.6	317.2	306.7	623.9	304.1	292.8	596.9
Luxembourg	413.8	377.4	791.2	433.0	440.3	873.3	423.1	375.8	798.9	420.7	370.9	791.6
Netherlands	368.9	324.2	693.0	410.7	319.9	730.6	391.8	311.1	702.9	365.1	324.9	690.0
Poland	227.6	84.1	311.7	170.8	58.7	229.5	88.4	32.6	120.9	94.8	44.0	138.8
Portugal	91.4	73.8	165.1	65.4	54.8	120.2	54.8	47.6	102.4	73.5	62.1	135.6
Spain	560.4	432.4	992.8	837.3	563.8	1,401.1	858.3	576.0	1,434.2	533.6	409.9	943.6
Sweden	2,294.1	2,269.5	4,563.6	2,241.7	2,247.9	4,489.5	2,286.6	2,287.3	4,573.9	2,288.4	2,287.9	4,576.3
United Kingdom	7,217.1	7,756.2	14,973.2	7,621.8	8,165.0	15,786.8	7,381.7	7,979.2	15,360.9	7,286.0	7,844.6	15,130.6
Other Countries	27.9	8.4	36.3	27.0	8.4	35.4	33.4	7.9	41.2	33.5	7.5	41.0
Total	15,027	15,697	30,724	15,282	15,842	31,124	15,209	15,759	30,968	14,856	15,658	30,514

4.51 These tables illustrate the effect of different balances of the CCCTB apportionment weighting factors on the tax base, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

Figure 38 Taxable base (aggregate of sample) – share by country (part 1)

€ millions	As-is tax base			CCCTB - combination 1			CCTB		
	Year 1	Year 2	Total	Year 1	Year 2	Total	Year 1	Year 2	Total
Belgium	3.0%	1.1%	2.0%	3.5%	2.8%	3.2%	5.9%	3.7%	4.7%
Denmark	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%
France	16.6%	16.6%	16.6%	8.9%	15.6%	12.3%	13.4%	15.0%	14.2%
Germany	7.2%	7.4%	7.3%	7.4%	4.5%	6.0%	12.0%	9.8%	10.9%

Greece	0.5%	0.4%	0.4%	0.3%	0.0%	0.2%	0.3%	0.2%	0.3%
Ireland	3.5%	7.6%	5.7%	2.0%	1.5%	1.7%	6.4%	7.5%	6.9%
Italy	1.9%	1.8%	1.9%	2.2%	2.1%	2.1%	4.1%	4.6%	4.4%
Luxembourg	2.0%	1.5%	1.8%	2.7%	2.4%	2.6%	2.9%	2.5%	2.7%
Netherlands	3.3%	1.5%	2.3%	2.6%	2.0%	2.3%	1.3%	1.5%	1.4%
Poland	1.3%	2.5%	1.9%	1.2%	0.4%	0.8%	1.3%	1.9%	1.6%
Portugal	0.4%	0.2%	0.3%	0.4%	0.4%	0.4%	0.4%	0.1%	0.2%
Spain	3.5%	3.6%	3.5%	5.7%	3.7%	4.7%	4.4%	3.8%	4.1%
Sweden	23.0%	12.9%	17.6%	14.9%	14.4%	14.6%	10.9%	6.9%	8.8%
United Kingdom	33.4%	42.5%	38.2%	47.7%	50.1%	48.9%	36.2%	42.1%	39.2%
Other Countries	0.5%	0.5%	0.5%	0.2%	0.1%	0.1%	0.4%	0.4%	0.4%
Sample total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Figure 39 Taxable base (aggregate of sample) – share by country (part 2)

€ millions	CCCTB - combination 2			CCCTB - combination 3			CCCTB - combination 4			CCCTB - combination 5		
	Year 1	Year 2	Total	Year 1	Year 2	Total	Year 1	Year 2	Total	Year 1	Year 2	Total
Belgium	3.8%	3.0%	3.4%	4.7%	3.7%	4.2%	3.5%	2.8%	3.1%	3.8%	3.0%	3.4%
Denmark	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
France	9.3%	16.1%	12.8%	8.0%	14.9%	11.5%	9.0%	15.4%	12.2%	9.4%	15.9%	12.7%
Germany	7.5%	4.9%	6.2%	6.0%	3.5%	4.7%	7.5%	4.5%	6.0%	7.6%	4.9%	6.2%
Greece	0.2%	0.0%	0.1%	0.3%	0.0%	0.1%	0.2%	0.0%	0.1%	0.1%	0.0%	0.1%
Ireland	2.3%	1.7%	2.0%	1.8%	1.3%	1.5%	2.0%	1.5%	1.7%	2.2%	1.6%	1.9%
Italy	2.1%	2.0%	2.1%	1.8%	1.7%	1.7%	2.1%	1.9%	2.0%	2.0%	1.9%	2.0%
Luxembourg	2.8%	2.4%	2.6%	2.8%	2.8%	2.8%	2.8%	2.4%	2.6%	2.8%	2.4%	2.6%
Netherlands	2.5%	2.1%	2.3%	2.7%	2.0%	2.3%	2.6%	2.0%	2.3%	2.5%	2.1%	2.3%
Poland	1.5%	0.5%	1.0%	1.1%	0.4%	0.7%	0.6%	0.2%	0.4%	0.6%	0.3%	0.5%
Portugal	0.6%	0.5%	0.5%	0.4%	0.3%	0.4%	0.4%	0.3%	0.3%	0.5%	0.4%	0.4%
Spain	3.7%	2.8%	3.2%	5.5%	3.6%	4.5%	5.6%	3.7%	4.6%	3.6%	2.6%	3.1%
Sweden	15.3%	14.5%	14.9%	14.7%	14.2%	14.4%	15.0%	14.5%	14.8%	15.4%	14.6%	15.0%
United Kingdom	48.0%	49.4%	48.7%	49.9%	51.5%	50.7%	48.5%	50.6%	49.6%	49.0%	50.1%	49.6%
Other Countries	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.2%	0.0%	0.1%	0.2%	0.0%	0.1%
Sample total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

4.52 These tables illustrate the effect of different balances of the CCCTB apportionment weighting factors on the tax base share by country, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

Figure 40 Average MNC tax base, turnover-weighted and unweighted (part 1)

€ millions	As-is tax base			CCCTB - combination 1			CCTB		
	Year 1	Year 2	Total	Year 1	Year 2	Total	Year 1	Year 2	Total
Unweighted average	1,142	1,312	1,227	1,180	1,215	1,198	1,225	1,310	1,268
Turnover-weighted average	1,675	2,787	2,231	2,214	2,722	2,468	2,260	2,798	2,529

Figure 41 Average MNC tax base, turnover-weighted and unweighted (part 2)

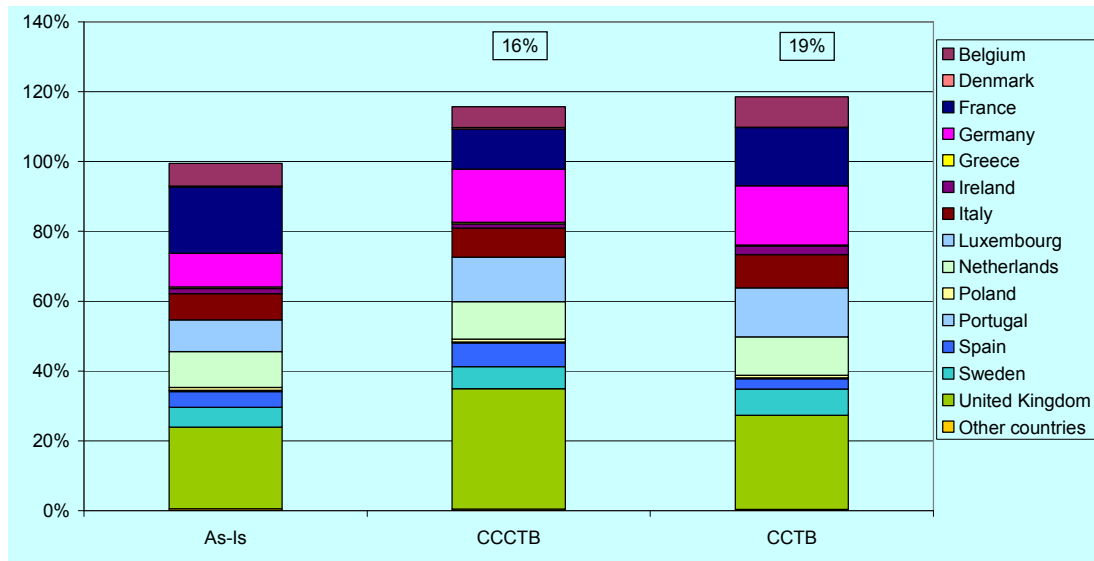
€ millions	CCCTB - combination 2			CCCTB - combination 3			CCCTB - combination 4			CCCTB - combination 5		
	Year 1	Year 2	Total	Year 1	Year 2	Total	Year 1	Year 2	Total	Year 1	Year 2	Total
Unweighted average	1,156	1,207	1,182	1,176	1,219	1,197	1,170	1,212	1,191	1,143	1,204	1,174
Turnover-weighted average	2,195	2,717	2,456	2,210	2,722	2,466	2,206	2,721	2,463	2,185	2,715	2,450

4.53 These tables illustrate the effect of different balances of the CCCTB apportionment weighting factors on the average MNC tax base, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

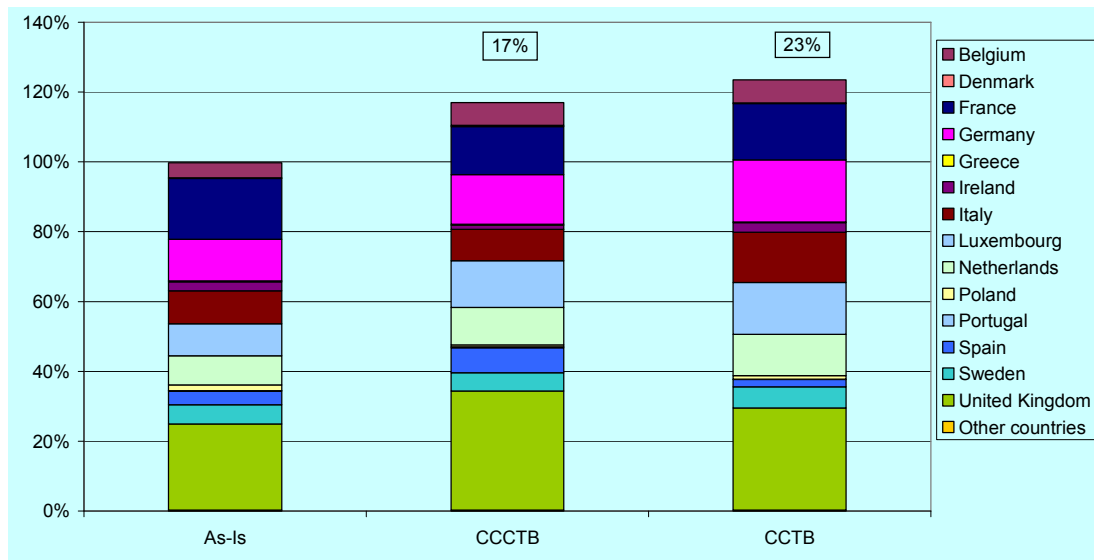
B. Cash tax charge

Figure 42 Average tax charge (Year 1, as-is =100%)



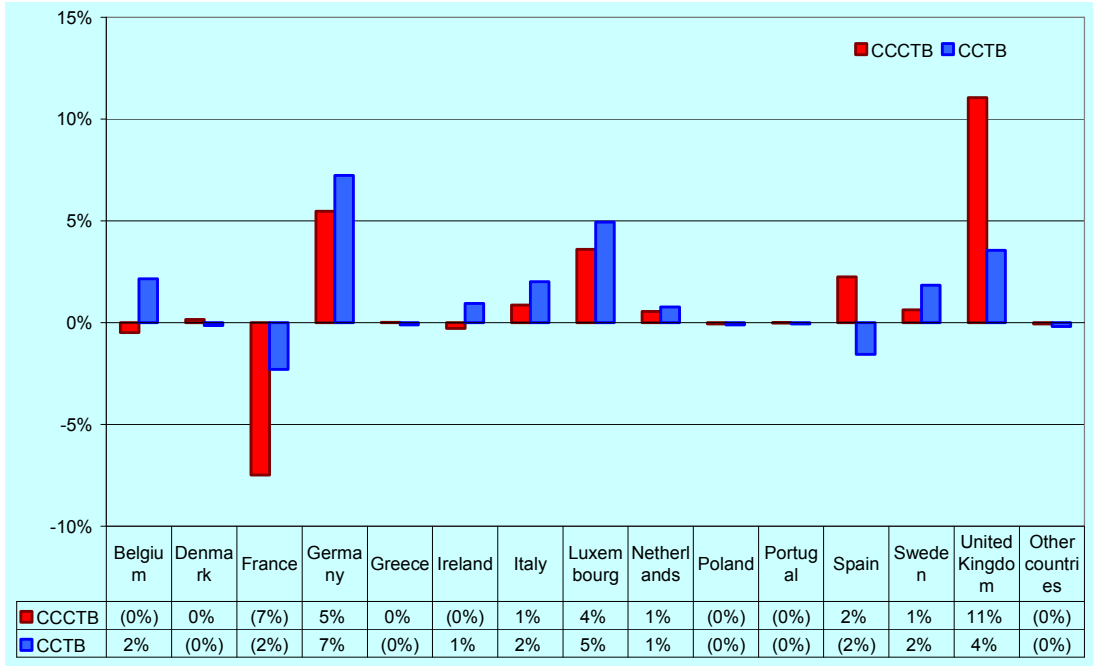
4.54 This is the year 1 element of the data supporting Figure 7 (see page 9). In this period, there were no major tax losses, and it can be seen that both the CCCTB and CCTB average tax charges (expressed as a percentage of the as-is situation), have grown by similar amounts. This effect is discussed in relation to the two-year average shown in Figure 7 above.

Figure 43 Average tax charge (Year 2, as-is =100%)



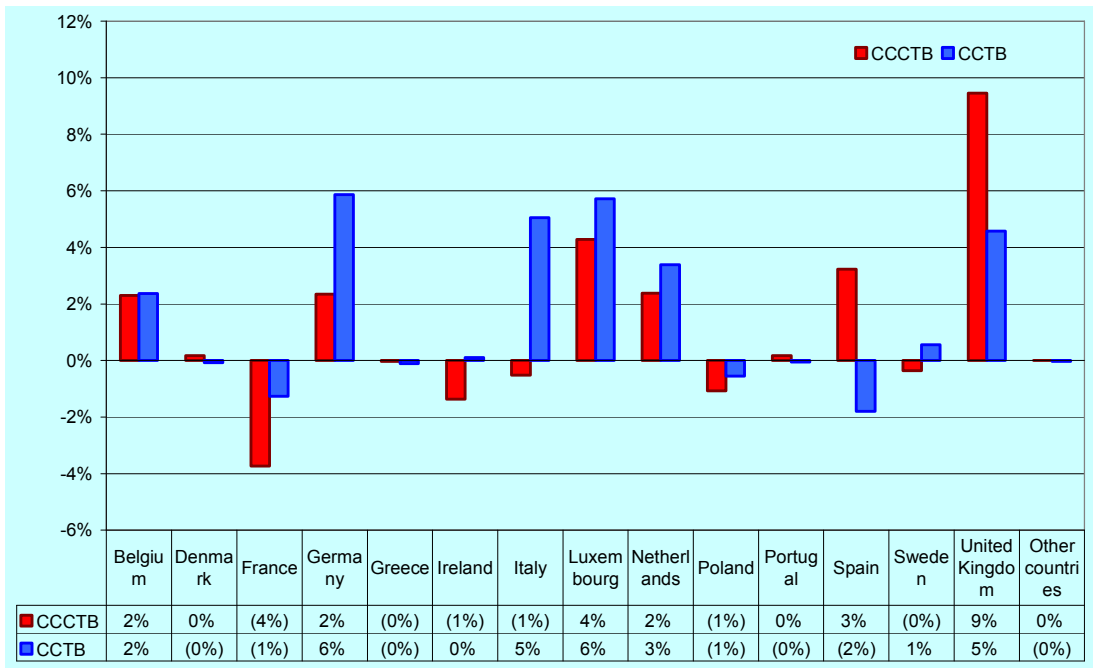
4.55 This is the year 2 element of the data supporting Figure 7 (see page 9). In this period, there was a major loss, and it can be seen that the gap between CCCTB and CCTB tax charges has consequently widened. This relationship broadly mirrors that regarding the average size of the tax base between years 1 and 2 (Figure 13 and Figure 14).

Figure 44 Change in cash tax charge (year 1, as-is = 100%)



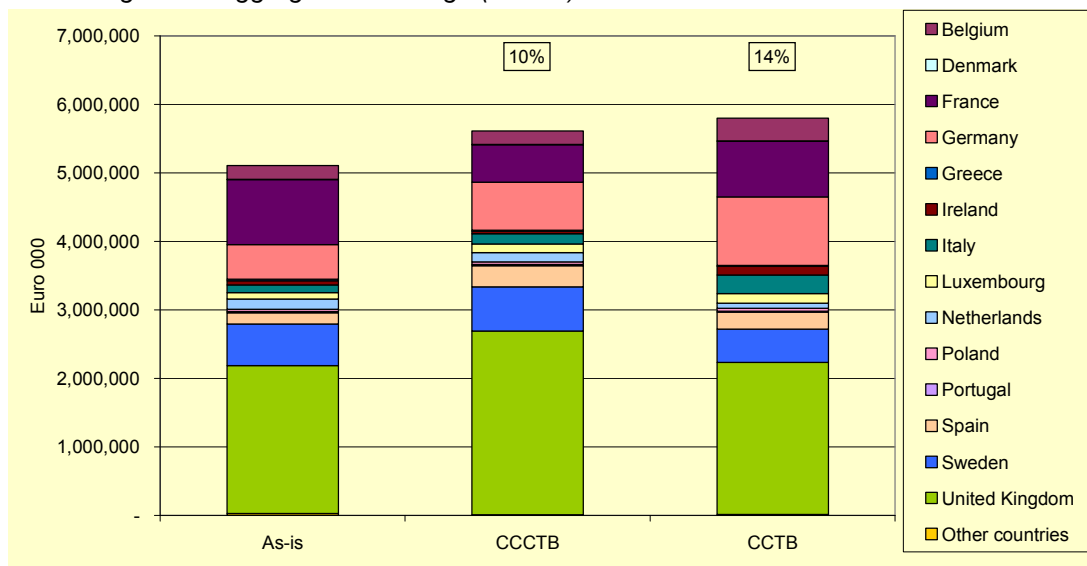
- 4.56 This graph presents the year 1 data supporting Figure 9 (see page 11). It shows how for most countries the change in the average distribution of the tax charge under both CCCTB and CCTB is within the margins of error in the data. Under CCCTB, however, the size of the French tax charge is significantly reduced, whilst in Germany and especially the UK, it increases. The increase in the tax charge in Germany is greater than the increase in the size of the tax base, as shown in Figure 15 (see page 18).
- 4.57 Under CCTB, Germany sees the most significant increase in the size of the tax charge, as compared to Luxembourg and the UK, the other two countries that saw an increase in the size of their tax bases under CCCTB.

Figure 45 Change in cash tax charge (year 2, as-is = 100%)



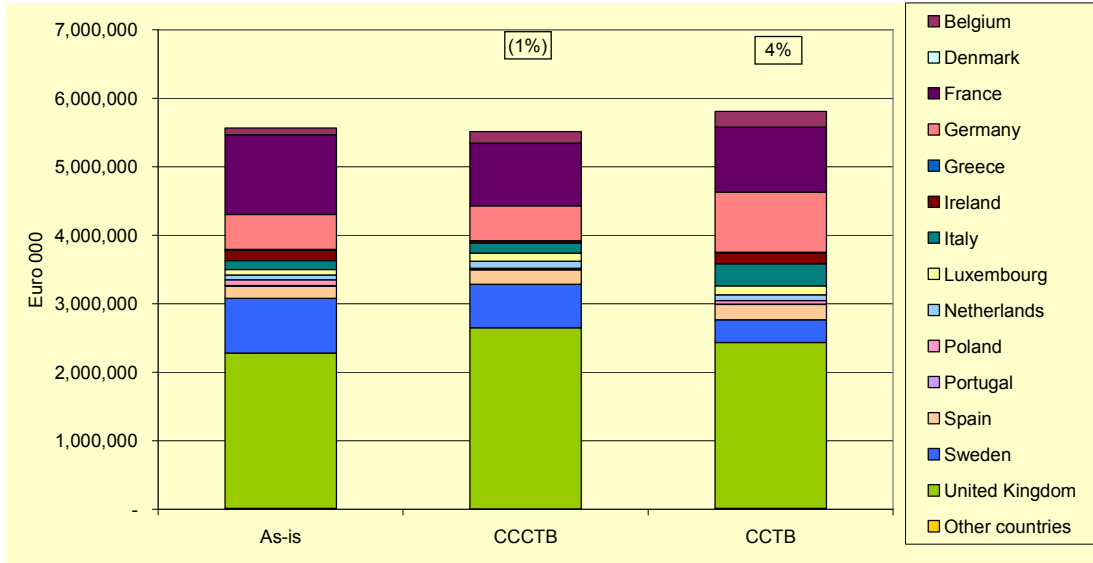
- 4.58 This graph presents the year 2 data supporting Figure 9 (see page 11). In this year, there was, as mentioned elsewhere, a major loss. The effect of this loss offset can be seen in the overall tendency for the CCTB tax charge to increase by more (or decrease by less) than the CCCTB charge, although interestingly whilst France's tax charge falls, it does not fall as much as in year 1. The increase in tax charge in the UK is also less than in year 1, consistent with the larger increase in UK tax base in year 1 and smaller increase in year 2 shown in Figure 15 (see page 18) and Figure 16 (see page 19).
- 4.59 Under CCTB, as in year 1, Germany sees the largest increase in the size of its tax charge despite not seeing the largest growth in its tax base under CCTB (see Figure 16). Italy, Luxembourg and the UK also do well, as might be expected from the increase seen in the size of their tax bases (Figure 16).

Figure 46 Aggregate tax charge (Year 1)



- 4.60 Figure 46 is the year 1 data subset of Figure 8 (see page 10). It illustrates how in a year without a significant loss, and the consequent group relief effect of CCCTB, the aggregate tax charge under CCCTB and CCTB is higher than the As-Is situation. It is notable that the increase is approximately the same for both scenarios, despite the different apportionment of the tax base between the two. We might speculate that this is because the tax base is principally moving between France, Germany, and to a lesser extent Spain and Sweden, and the UK. All of these countries have a similar range of local tax rates, and therefore the redistribution of taxable profit does not significantly alter the overall increase in tax charge.

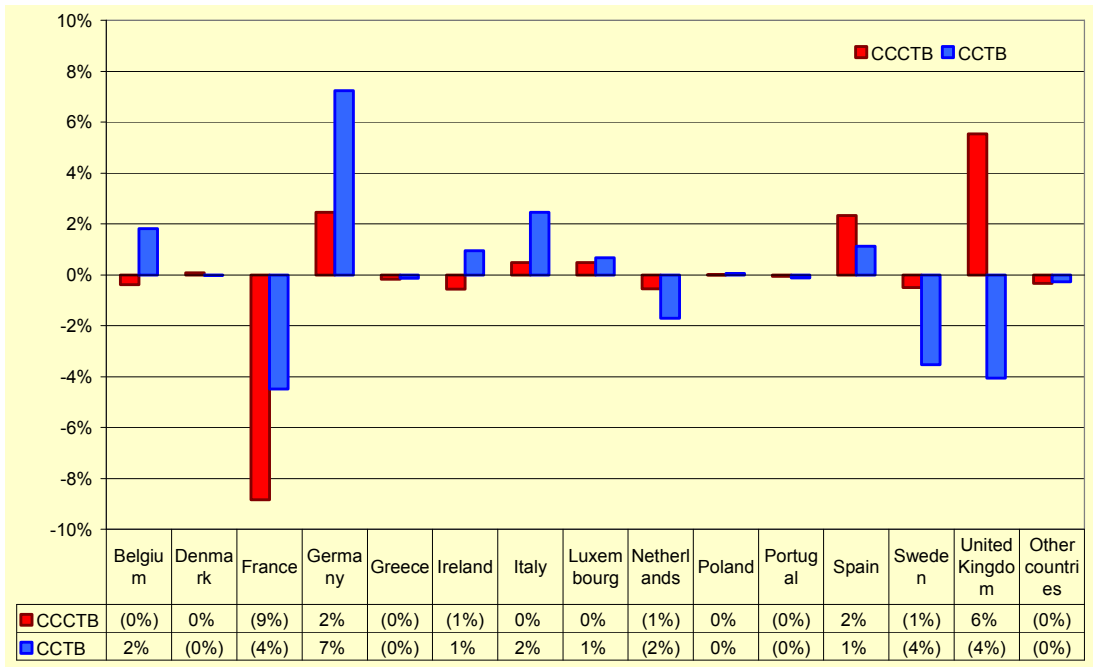
Figure 47 Aggregate tax charge (Year 2)



4.61 This is the year 2 data subset of Figure 8 (see page 10). In year 2, there is a significant loss, and the impact of the reduction in the tax base under the effect of CCCTB group loss relief can clearly be seen, with a slight reduction in the tax charge compared to the As-Is case.

4.62 The total tax charge under CCTB is also only very slightly increased from the As-Is situation, this increase being markedly lower than that in year 1 (see Figure 46). This appears to be related to the change in the size of the aggregate tax base, the reasons for which are discussed under Figure 18 (see page 20).

Figure 48 percentage Change in percentage share of aggregate tax charge - percentage points up or down (year 1)

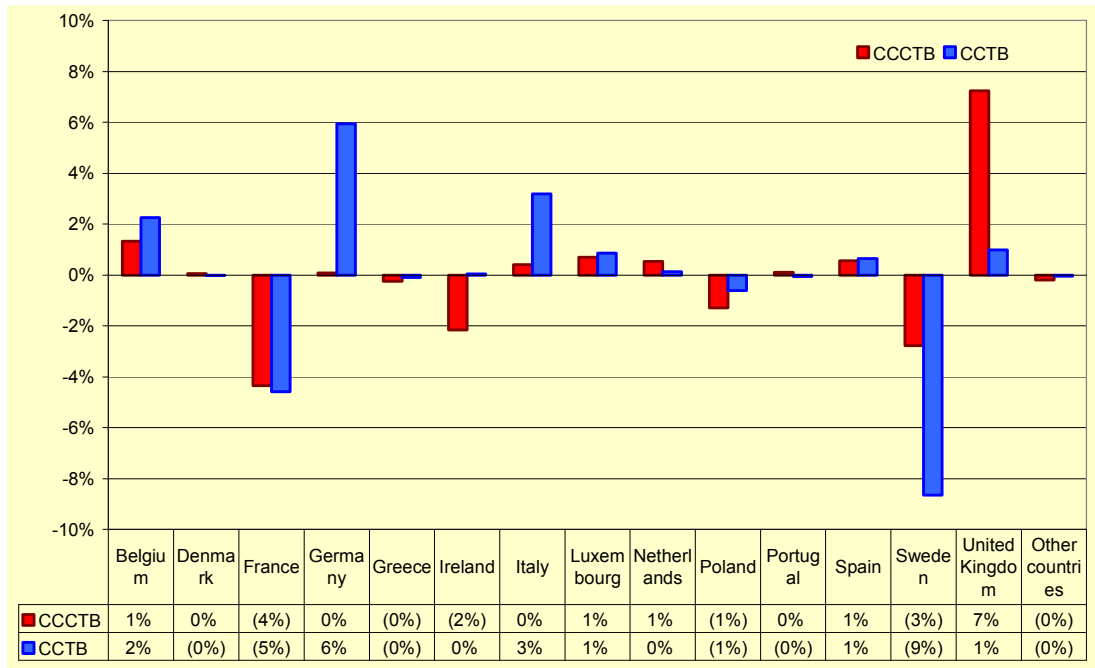


4.63 This is the year 1 element of the data presented in Figure 50, being the change in the aggregate tax charge distribution presented in Figure 46. It illustrates how, under CCCTB, France loses a significant amount of aggregate tax charge, whilst the UK gains. No other countries see a statistically significant change, although the gain seen

in Germany is consistent with that in Figure 44, based on an average approach. The trends are broadly similar to those shown in the equivalent tax base (Figure 19, see page 21), in particular regarding the UK gain and French loss in aggregate tax charge. However, the German gains are more pronounced for the tax charge, which is apparently due to the relatively high tax rate.

4.64 Under CCTB, both France and the UK see quite large falls in their aggregate tax charges, whilst Germany gains by far the largest amount. Of these, the French and German movements are consistent with those shown in Figure 44 (the average approach), whilst the UK decrease was an opposite trend. This suggests that the larger MNCs, who dominate the aggregate total, are losing more tax charge under CCTB than the average MNC does.

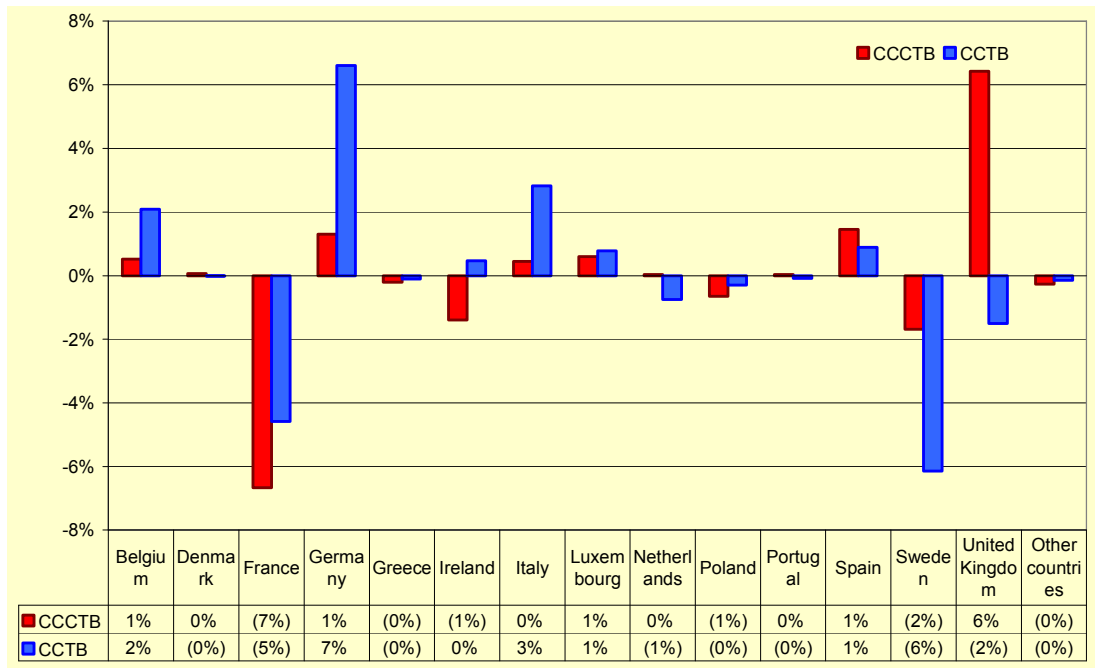
Figure 49 Change in percentage share of aggregate tax charge - percentage points up or down (year 2)



4.65 This is the year 2 element of the data presented in Figure 50, being the change in the aggregate tax charge presented in Figure 47. The fall in the French aggregate tax charge is consistent with that calculated on an average basis, shown in Figure 45, as is the increase in the UK charge. The falls in aggregate tax charge shown here in Poland and Sweden (albeit on the margins of statistical relevance) are less pronounced on the average basis, suggesting again that it is a larger MNC effect.

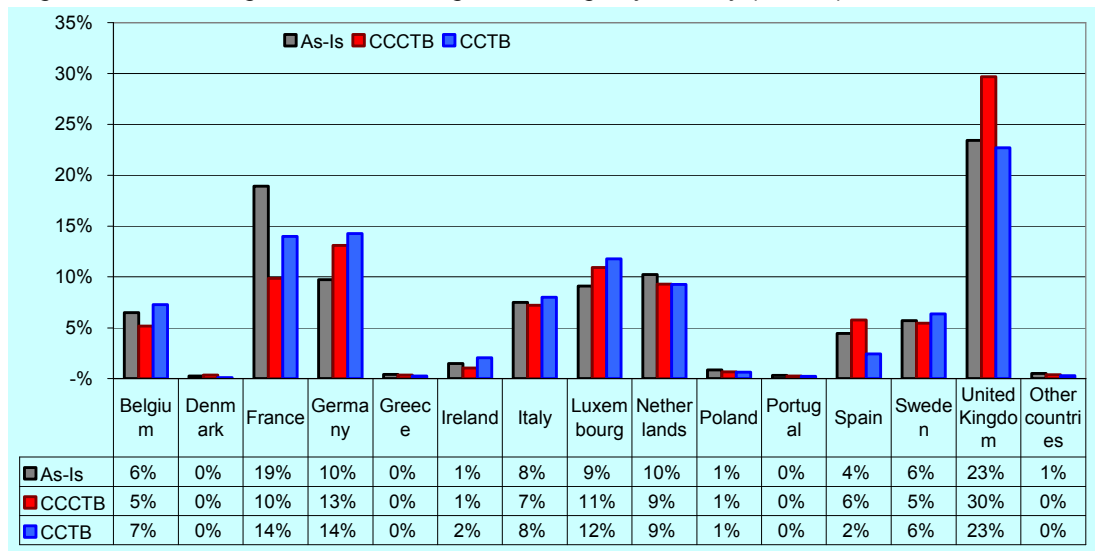
4.66 Under CCTB, most of the same trends seen in Figure 45 (the average approach) are seen again here under the aggregate approach, if anything exaggerated slightly: the fall in France and the growth in Germany are both larger, whilst Sweden's small gain on average turns into a large loss of tax charge when looked at from an aggregate perspective. This suggests that one or more of the larger MNCs are dominating Sweden's data from the aggregate perspective.

Figure 50 Change in percentage share of aggregate tax charge - percentage points up or down (average over 2 years)



4.67 This is the movement in the aggregate tax charge, being the change in the aggregate tax charge presented in Figure 8 (see page 10). It represents the average of the data presented in Figure 48 and Figure 49, and can best be understood by studying the trends in each of those years. The comparable graph prepared on an average basis is presented as Figure 9 (see page 11). As we have seen from the study of the individual years, the effects of the larger MNCs are dominating this analysis.

Figure 51 Percentage share of average tax charge by country (Year 1)

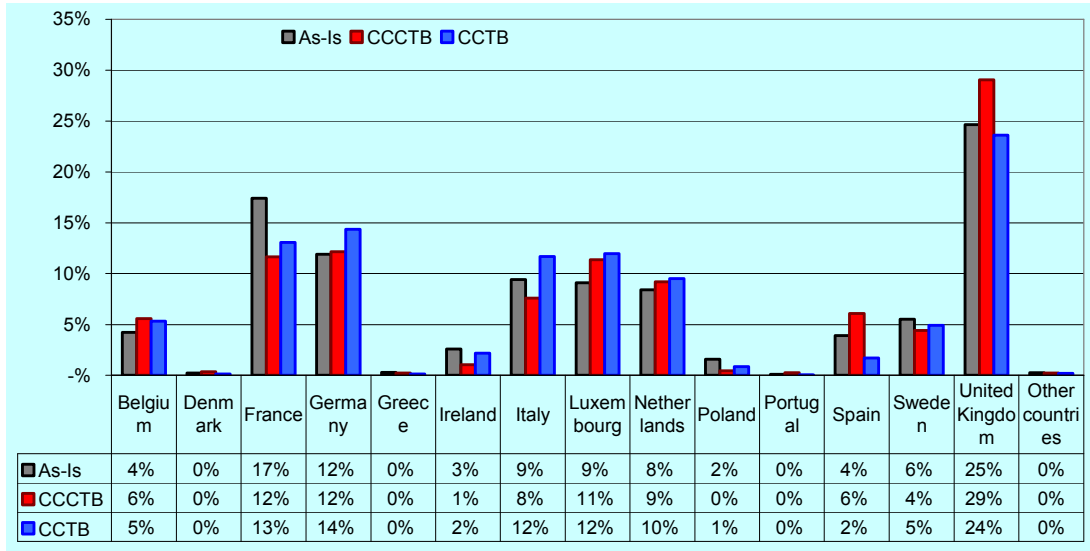


4.68 This is the same data set as that presented in Figure 42 (and the year 1 data element of Figure 7, see page 9), but presented as the share of tax charge by country, that is, the 'share of the cake'. Thus the data for each scenario sums to 100%, regardless of any changes in the overall size of the tax charge. The relative movements between the as-is situation and the CCCTB and CCTB scenarios are also presented in Figure 44, whilst this graph illustrates the relative importance of those movements to each country.

4.69 It can be seen that under CCCTB, the fall in the French tax charge constitutes about 8% of the average EU-wide tax charge, whilst Germany gains an additional 5% and the UK an additional 11% share of the average tax charge.

4.70 Under CCTB, Germany saw the biggest increases in its tax charge (see Figure 44), and here this can be seen to be an increase of approximately an additional 7% share. Luxembourg, whilst gaining less than Germany, nevertheless sees an increase of 5%.

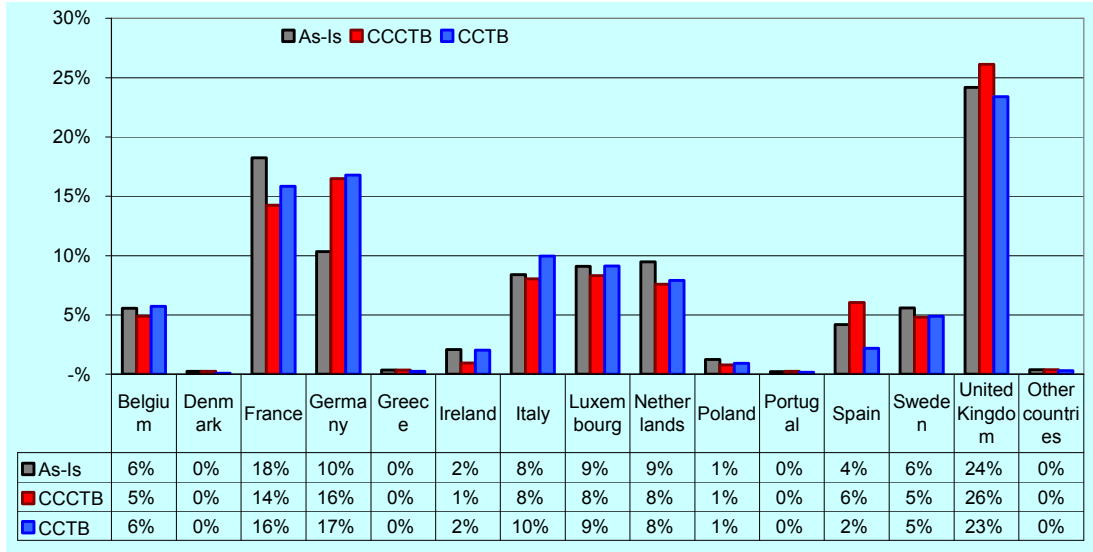
Figure 52 Percentage share of average tax charge by country (Year 2)



4.71 This is the same data set as that presented in Figure 43 (and the year 2 data element of Figure 7, see page 9) but presented as the share of tax charge by country, that is, the 'share of the cake'. Thus the data for each scenario sums to 100%, regardless of any changes in the overall size of the tax charge. The relative movements between the as-is situation and the CCCTB and CCTB scenarios are also presented in Figure 45, whilst this graph illustrates the relative importance of those movements to each country.

4.72 In the second year, the effects vary slightly under CCCTB. Germany gains less tax charge, and proportionately it is verging on the statistically insignificant. Both Luxembourg and Spain see an increase that is a relatively large in proportion to their as-is share of tax charge, but these results must be treated with some caution given the relatively small sample size. The biggest increase under CCCTB in year 2 is again in the UK, which sees an increase of 9% in its share of the tax charge.

Figure 53 Percentage share of average tax charge by country (average over 2 years)

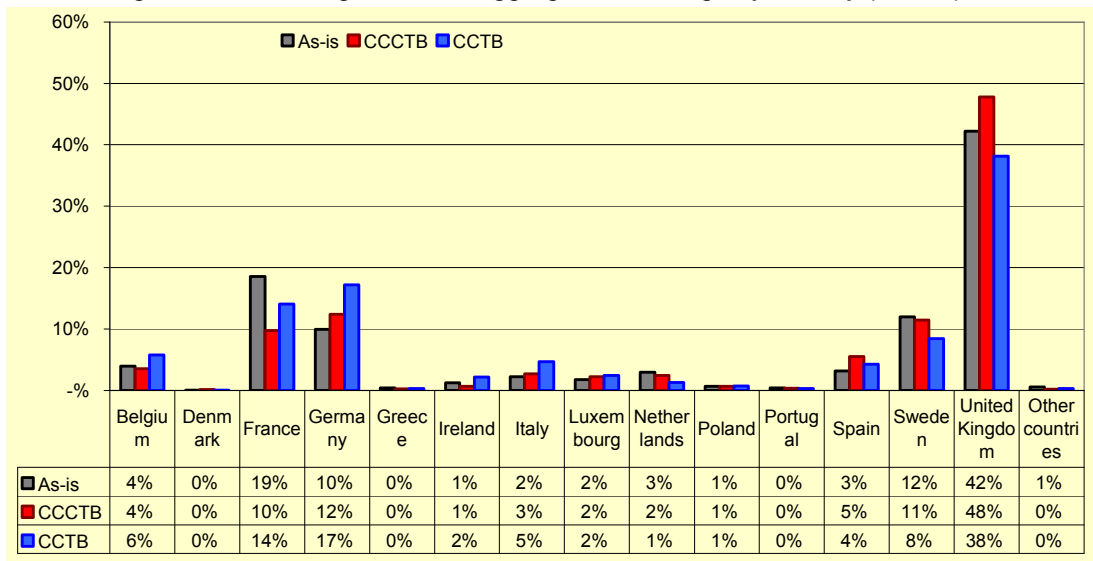


4.73 This is the same data set as that presented in Figure 7 (see page 9) but presented as the share of tax charge by country, that is, the ‘share of the cake’. Thus the data for each scenario sums to 100%, regardless of any changes in the overall size of the tax charge. The relative movements between the as-is situation and the CCCTB and CCTB scenarios over two years are presented and discussed from paragraph 2.17 onwards.

4.74 The data behind this graph can best be understood by studying Figure 51 and Figure 52, its constituent elements in years 1 and 2 respectively. On average over the 2 years of the study, under CCCTB, it can be seen that France’s share of the overall tax charge falls by about 5%, whilst Germany gains a similar amount, and the UK also increases its share. There are relatively large movements seen also in Luxembourg and Spain, but these should be treated with some caution given the sample size.

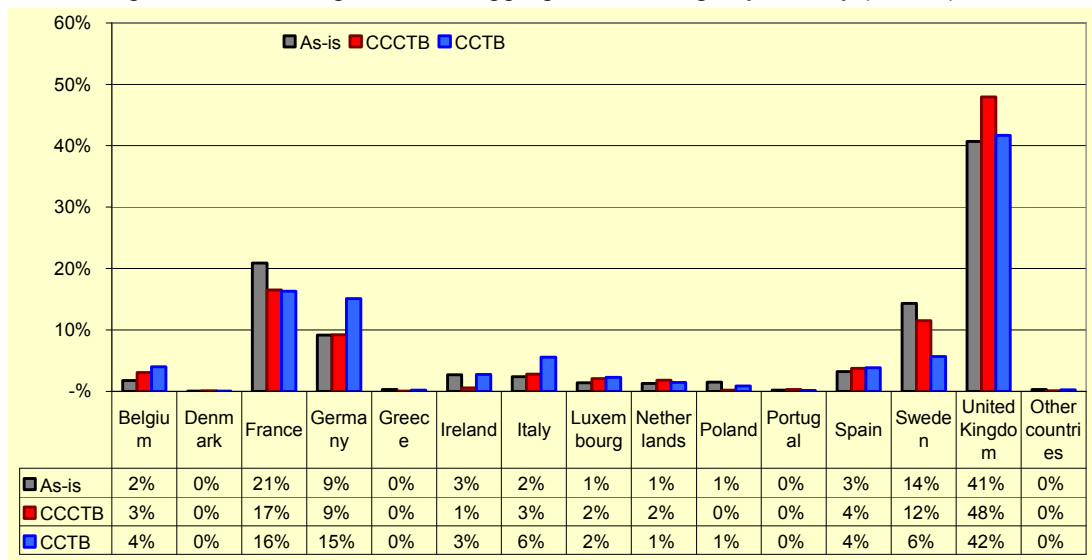
4.75 Under CCTB, on average, Germany increases its share of tax charge significantly, with Luxembourg and Italy also showing relatively large increases (a result to be treated with caution, given the sample size). The most significant loss of share of tax charge appears in Spain, where it roughly halves on average.

Figure 54 Percentage share of aggregate tax charge by country (Year 1)



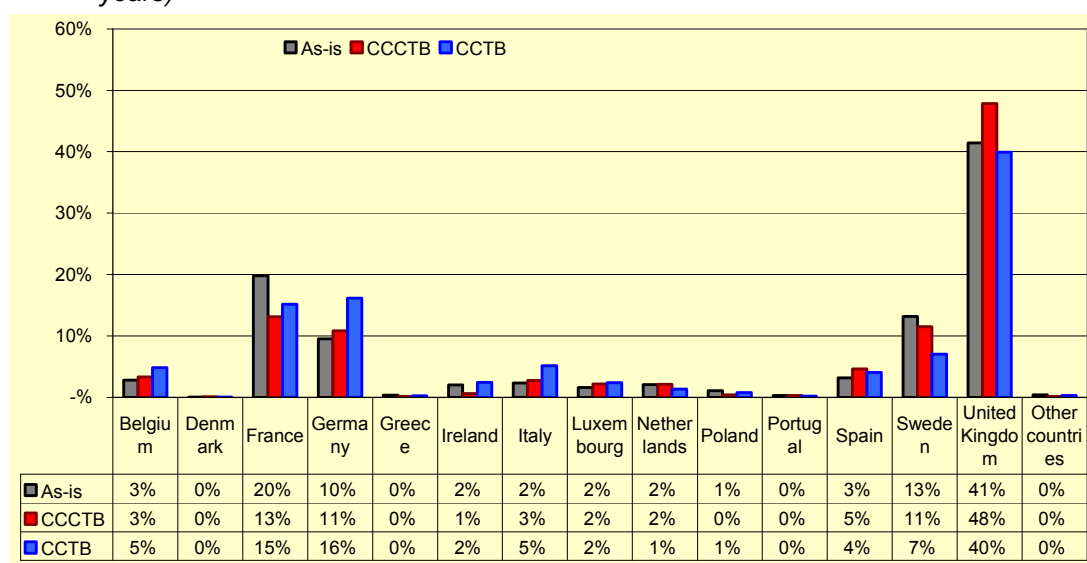
- 4.76 This is the aggregate equivalent of Figure 51, showing the percentage distribution of the data presented in Figure 46, in order to show the relative movements between the as-is, CCCTB and CCTB scenarios for each country. The movements themselves are shown in Figure 48, whereas here they are presented in the context of the original percentage share of tax base by country. The data for each scenario sums to 100%, regardless of any changes in the overall size of the tax charge.
- 4.77 This graph shows how, using an aggregate approach and therefore favouring the larger MNCs in the sample, the result differs slightly from an average approach, where all MNCs have equal weighting. In this graph, it can be seen how, under CCCTB, France appears to lose just under half of its share of tax charge, whilst few other countries see any appreciable changes, other than the UK which sees a growth in its share.
- 4.78 Under CCTB, the fall in the French share of aggregate tax charge is less significant compared to the equivalent fall under CCCTB. The increase in the German tax charge is much greater, and Germany sees an increase of 7%, mirroring the increase seen under the average approach in Figure 51.

Figure 55 Percentage share of aggregate tax charge by country (Year 2)



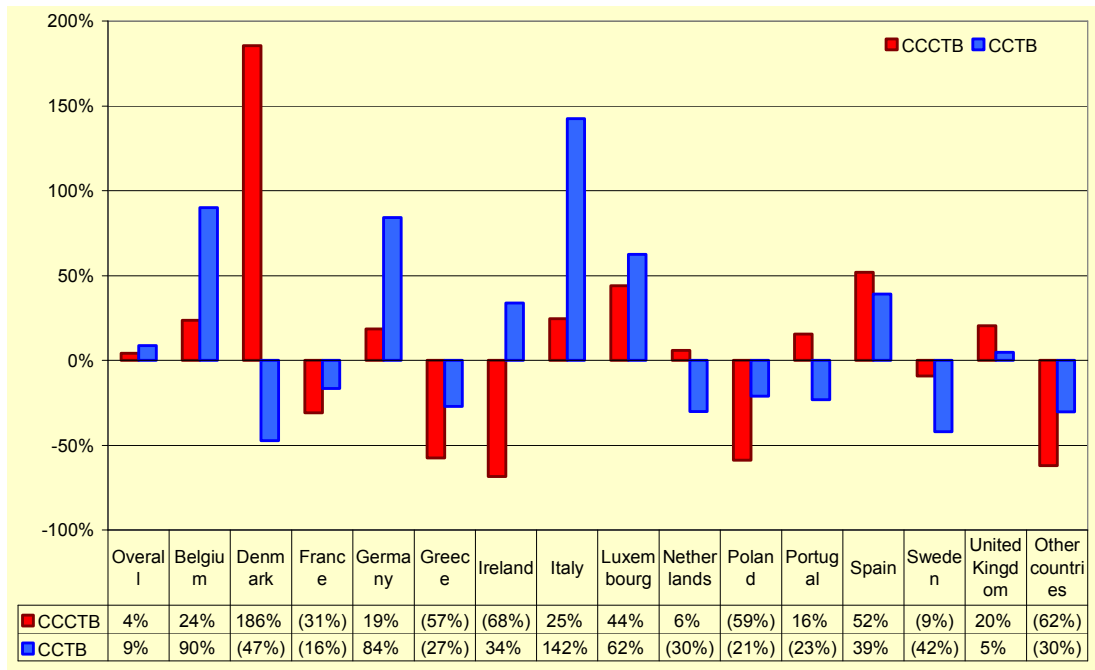
- 4.79 This is the aggregate equivalent of Figure 53, showing the percentage distribution of the data presented in Figure 47, in a way to see the relative movements between the as-is, CCCTB and CCTB scenarios for each country. The movements themselves are shown in Figure 49, whereas here they are presented in the context of the original percentage share of tax charge by country. The data for each scenario sums to 100%, regardless of any changes in the overall size of the tax charge.
- 4.80 Under CCCTB, as can be seen, in year 2 there are barely any statistically significant movements in the distribution of aggregate tax charge. In France, the share of tax charge falls by approximately 4%, and in the UK it increases by approximately 7%.
- 4.81 Under CCTB, the situation is also one of few movements. France sees a similar decline in share to that under CCCTB, whilst this time Germany sees a significant increase of over half of the as-is share of tax charge, and Italy appears to more than double, although this result should be treated with caution given the sample size. Sweden sees the largest fall in tax charge in year 2 under CCTB, as its share more than halves, although again this result should be treated with some caution.

Figure 56 Percentage share of aggregate tax charge by country (average over 2 years)



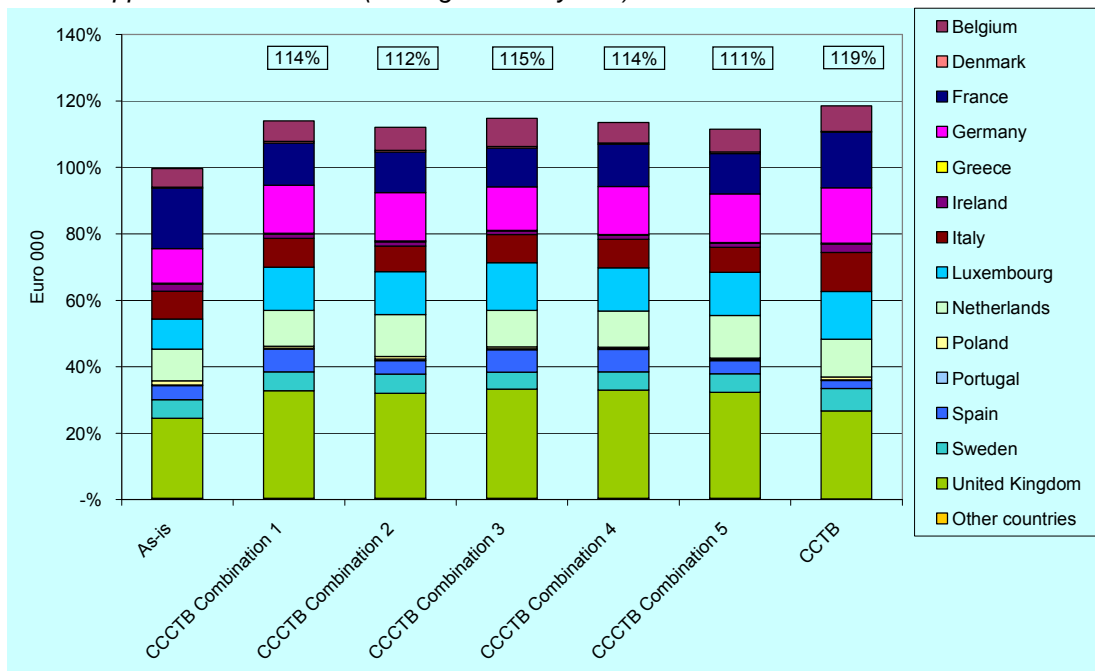
- 4.82 This is the same data set as that presented in Figure 8 (see page 10), but showing the percentage distribution and split by country to aid the comparison of the tax charge between the as-is, CCCTB and CCTB scenarios. The relative movements between the as-is situation and the CCCTB and CCTB scenarios are presented in Figure 50. The data for each scenario sums to 100%, regardless of any changes in the overall size of the tax charge.
- 4.83 This data is then the average of the data presented in Figure 54 (year 1) and Figure 55 (year 2), and shows consequently relatively small movements compared to the size of the as-is tax charge. It would appear that under CCCTB, France, which has consistently shown a loss of tax base and tax charge, sees a reduction in its share aggregate tax charge over 2 years of about 7%, whilst the UK sees an increase of about 7%. There are no other significant movements.
- 4.84 Under CCTB, France again loses tax charge share, this time falling by only about 5%, as does Sweden, which sees a fall of just under half of its as-is share of tax charge. The largest gain is in Germany, which increases its share by more than half.

Figure 57 Change in aggregate tax charge as percentage of as-is tax charge (average over 2 years)



4.85 This graph illustrates the change in the tax charge as a percentage of the As-Is tax charge. In this it differs from Figure 50, which instead shows the change in percentage share of tax charge (for example, if a given country had on average 12% of the as-is tax charge, but 10% of the tax charge under CCCTB, the figure shown for CCCTB would be -2%). Where the sample for a country has a relatively small as-is tax charge, this has the effect of giving an apparently very large percentage change. This result is a reflection of the sample size and should not be extrapolated to MNCs in that country as a whole. We prefer an analysis which shows the change in percentage share (see Figure 50 in particular).

Figure 58 Average tax charge by country under different weighting of CCCTB apportionment factors (average over 2 years)

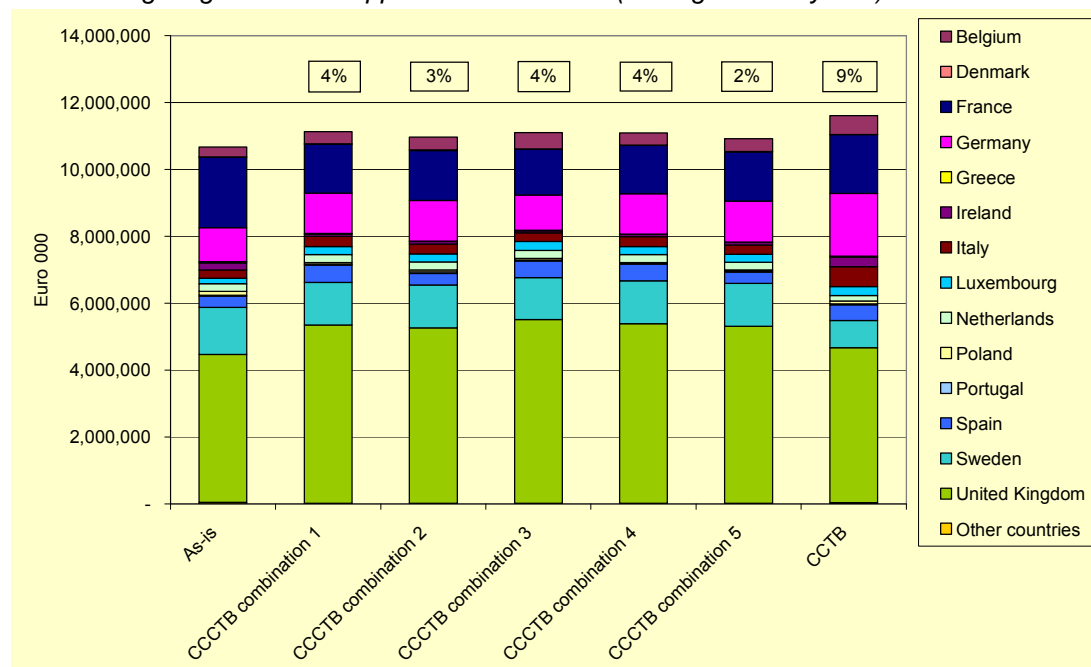


4.86 This graph illustrates the effect of different weightings of the CCCTB apportionment factors on the distribution of the tax charge, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

4.87 This same data is shown split by country in Figure 60 below. Consistent with Figure 30 and Figure 6 (see page 8), the different weightings applied to the different apportionment factors have very little impact on the relative distribution of tax charge using the different apportionment combinations.

Figure 59 Percentage share of aggregate tax charge by country under different weighting of CCCTB apportionment factors (average over 2 years)

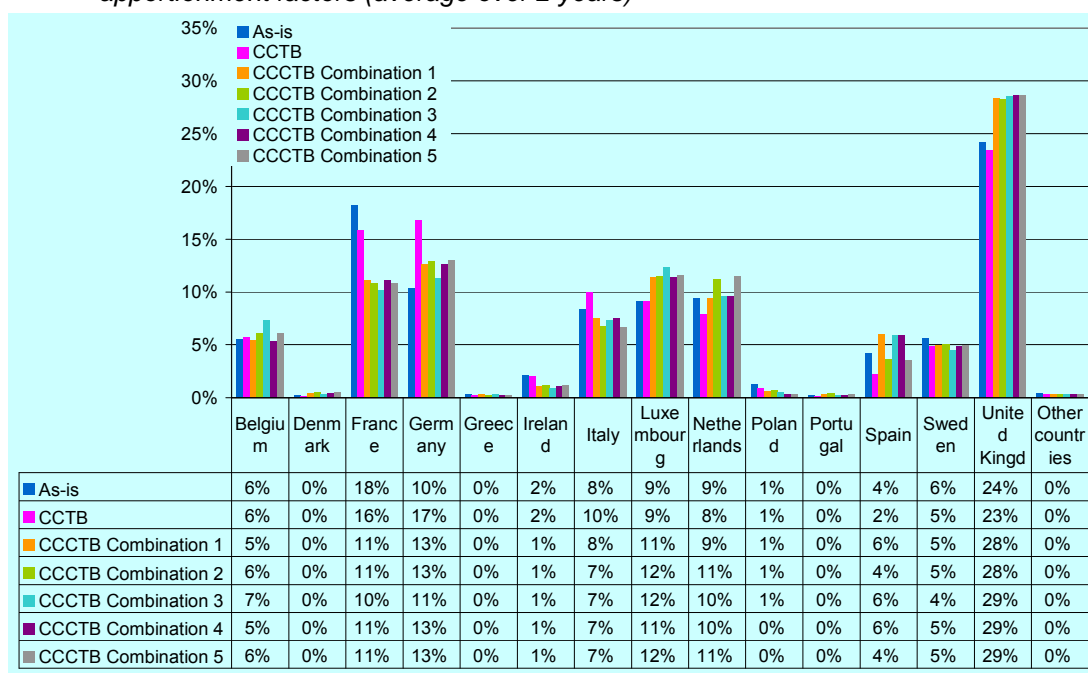


4.88 This graph illustrates the effect of different weightings of the CCCTB apportionment factors on the aggregate tax charge, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

4.89 This same data is shown split by country in Figure 62 below. Consistent with Figure 31 (see page 30), Figure 6 (see page 8), and Figure 59, the different weightings applied to the different apportionment factors have very little impact on the relative distribution of tax charge using the different apportionment combinations.

Figure 60 Share of tax charge by country under different weighting of CCCTB apportionment factors (average over 2 years)

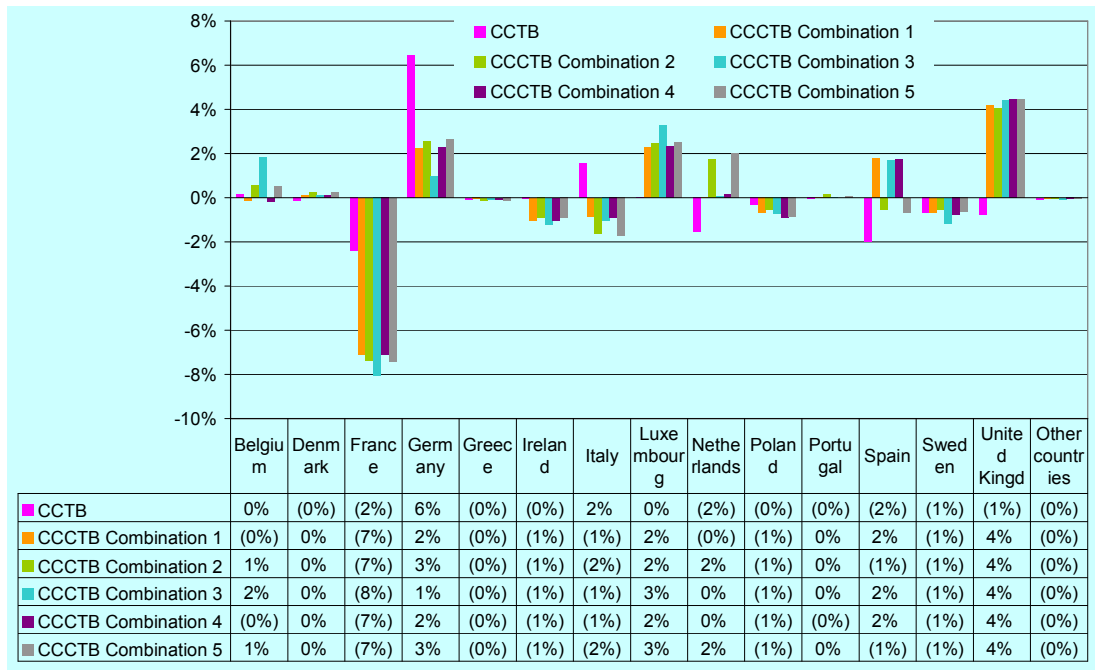


4.90 This graph presents the same data as that shown in columnar format in Figure 58, and illustrates the effect of different weightings of the CCCTB apportionment factors on the distribution of the tax charge, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

4.91 This presentation highlights the similarities in tax charge distribution between the different combinations for the individual countries. These movements are further illustrated in Figure 61 above.

Figure 61 Change in share of tax charge by country under different weighting of CCCTB apportionment factors (average over 2 years)

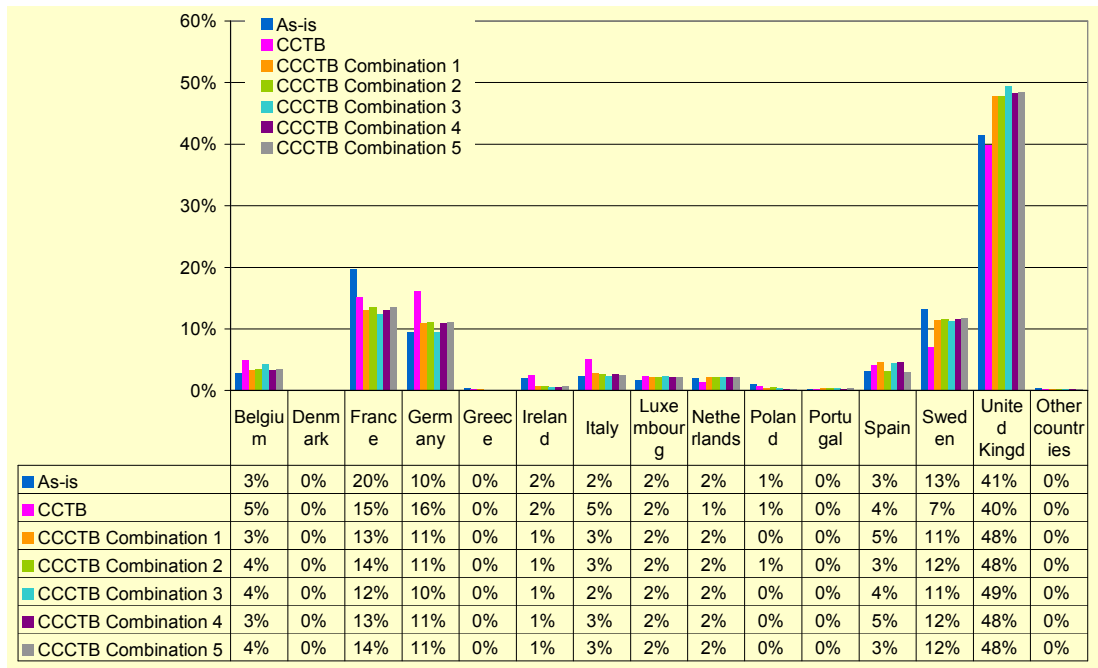


4.92 This graph illustrates the effect of different weightings of the CCCTB apportionment factors on the distribution of the tax charge compared to the as-is situation, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

4.93 This graph is based upon the data shown in Figure 60. It shows how different weightings applied to the apportionment factors have relatively little effect.

Figure 62 Percentage share of aggregate tax charge by country under different weighting of CCCTB apportionment factors (average over 2 years)

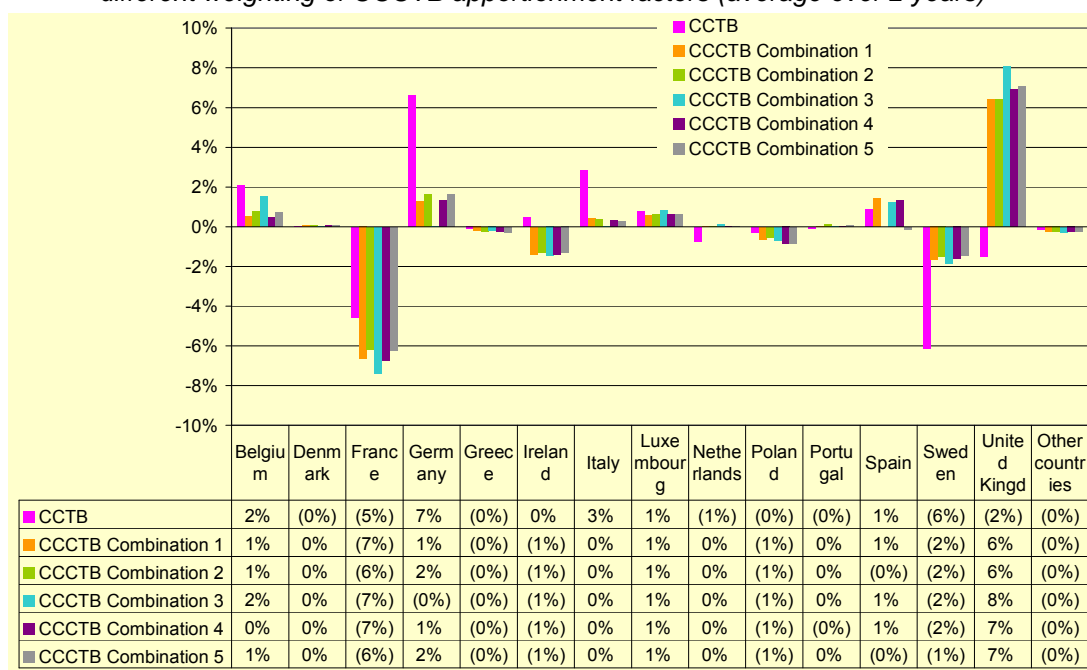


4.94 This graph illustrates the effect of different weightings of the CCCTB apportionment factors on the distribution of the aggregate tax charge, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

4.95 It is based on the data presented in columnar format in Figure 59. This presentation highlights the differences between the different combinations for the individual countries. These movements are further illustrated in Figure 63 below.

Figure 63 Change in percentage share of aggregate tax charge by country under different weighting of CCCTB apportionment factors (average over 2 years)



4.96 This graph, based on the data shown in Figure 62, illustrates the absolute movement in the percentage distribution of the aggregate tax charge under the different apportionment approaches, where:

- Combination 1 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination';
- Combination 2 uses 1/4 'Number of employees' + 1/4 'Cost of employees' + 1/2 'Assets';
- Combination 3 uses 1/6 'Number of employees' + 1/6 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by origin';
- Combination 4 uses 1/3 'Cost of employees' + 1/3 'Assets' + 1/3 'Sales by destination'; and
- Combination 5 uses 1/2 'Cost of employees' + 1/2 'Assets'.

4.97 Again, this graph illustrates how similar the aggregate tax charge distribution is under the five different combinations of apportionment factors, consistent with the relatively similar distribution of the different apportionment factors across the countries in the study, as illustrated in Figure 6 (see page 8).