The Implications of Cross Border Shopping for the Irish Exchequer

A Report Prepared by the Office of the Revenue Commissioners and the Central Statistics Office

February 2009

The Implications of Cross Border Shopping for the Irish Exchequer

Executive Summary

This report estimates the implications of cross border shopping for the Irish exchequer. The primary focus is on VAT and excise duty. The report begins by examining the causes of the price differentials between the Republic of Ireland and Northern Ireland. It is clear that the major causes of price differentials are costs, profit margins and the rapid depreciation of Sterling against the Euro. Changes in VAT rates have widened the price differentials but they remain small compared to the size of the change in the exchange rate. Cross border shopping is likely to remain an issue as long as Sterling remains weak.

There are significant difficulties associated with quantifying the extent of cross border shopping and estimating the implications for the Irish exchequer. In particular, the availability of quantifiable data on which to base any estimate of cross border shopping is extremely limited. Nevertheless, this report presents some initial estimates of cross border shopping by the Central Statistics Office (CSO). The approach makes the best possible use of a number of sources. A combination of market research data provided by TNS-Worldpanel was used together with other estimates and some technical adjustments. Based on the results, the tax revenue implications are then estimated by Revenue.

The estimated value of cross border shopping is in the range of €350 million to €550 million in 2008 (broad ranges are given for all estimates of cross border shopping and the resulting tax losses in this report). Cross border shopping in Ireland is not a new phenomenon. Taking the year 2007 as a measure of baseline activity, the estimates for cross border shopping in 2008 represent an increase of between €140 million and €210 million. If the exchange rate remains at close to current levels and if the spending patterns observed in late 2008 persist throughout 2009 (with normal seasonal variation), it is estimated that cross border shopping will increase by a further €100m to €150m this year compared to 2008.

The resulting VAT and excise duty revenue loss to the Irish exchequer is estimated to be between €58 million and €90 million for 2008, an increase of €24 million to €36 million compared to 2007. Using the forecast of cross border shopping for 2009, the tax revenue loss on VAT and excise is estimated to be in the range of €72 million and €112 million this year (between €14 million and €22 million more than 2008).

In addition to the VAT and excise loss, there is a possible corporation tax revenue loss that is tentatively estimated to be in the range of €15 million to €24 million for 2008 (between €6 million and €9 million higher than 2007). The forecast for 2009 is that the corporation tax loss will be between €20 million to €31 million. However, it should be noted that all estimates for corporation tax revenue are provisional and should only be considered as indicative of the potential loss.

For future work on this subject, the best option to measure the loss in tax revenue to the Irish exchequer would be a survey of cross border shoppers. This would identify the numbers travelling, the amounts spent and the goods bought and this data could then be used to extrapolate the results for the population as a whole and the implications for tax revenue. Revenue is working with the CSO to include a series of questions in the upcoming Quarterly National Household Survey in Quarter 2 of 2009. When available in Quarter 3, the results should provide data that will enable a more detailed assessment of the impact of cross border shopping. This will also serve to provide a validation of the initial results and address the primary constraint on the estimates contained in this report which is the limited availability of quantifiable data on cross border shopping.

1. Introduction

This report outlines the implications for the Irish exchequer of cross border shopping. The primary focus is on VAT and excise duty. Over the last year there has been a significant change in the price differentials between retailers in the Republic of Ireland and Northern Ireland. As a result of the Single European Market, consumers are able to respond to price differentials between countries by adjusting their spending patterns accordingly. In the Irish case, this has resulted in an increase in consumers from the Republic shopping in Northern Ireland since mid 2008.

The following section discusses some of the reasons for the price differentials between the Republic and Northern Ireland that are attracting consumers from the Republic to travel to Northern Ireland. Section 3 presents estimates of the extent of cross border shopping and attempts to measure the resulting exchequer loss. The final section concludes with a summary of the findings and outlines some proposals for further analysis on this subject.

2. Causes of Price Differentials between Republic and Northern Ireland

There is considerable evidence of price differentials on goods between the Republic and Northern Ireland. The most recently published study by the National Consumer Agency (NCA, June 2008) found that branded goods in the major supermarket chains were on average 31 per cent more expensive in the Republic (own brand goods were 17 per cent more expensive).[1] However, evidence of the causes of the price differentials is less clear-cut. Four factors can be identified, each discussed separately below: costs, taxes, profit margins and currency exchange rates. The NCA study covers only the large chains operating in both jurisdictions and consequently much of the discussion below focuses on them also, but many of the findings and conclusions are likely to hold for smaller and independent retailers also.

2.1 Costs

The costs of running a business will have a significant impact on the resulting prices faced by consumers. A report commissioned for Forfas (December 2008) provides evidence in this respect. [2]

---

[1] National Consumer Agency (2008), *Euro/Sterling Survey.*

[2] Forfas (2008), *The Cost of Running Retail Operations in Ireland.*

The Forfas report shows that operating costs are higher in Dublin than Belfast, by up to 46 per cent in some cases for comparable businesses. Costs in Dublin are more in line with London than Belfast. For other regional cities in Ireland such as Cork, Galway or Limerick, costs are lower than Dublin but in general are still higher than Belfast.

The Forfas report shows that labour costs (the largest unit cost for most retail businesses) are higher in Dublin than Belfast. The average store manager's salary is 33 per cent higher in Dublin than Belfast. Salaries for other workers follow similar patterns. The national minimum wage in the Republic is €8.65 per hour while the minimum wage in the UK is £5.73 per hour (€6.43 at current exchange rates).

Other operating costs also differ.[3] For example, the National Competitiveness Council (2008) found that industrial energy costs in the Republic were the second highest in the European Union (EU).[4] The UK was close to the average for the EU as a whole.

In total, the Forfas report finds that operating costs are on average 25 per cent higher in Dublin than Belfast. As operating costs typically represent between 20 to 25 per cent of the total costs of running a retail operation (the remainder of the costs are associated with the costs of the goods themselves), the Forfas report concludes that higher operating costs add about 5 to 6 per cent to the total cost base of retailers in Dublin compared to Belfast.

Differences in the costs to retailers of purchasing goods from suppliers (costs of goods as opposed to operating costs) may also vary between the Republic and Northern Ireland. The size of the UK market allows some suppliers to achieve economies of scale not possible in the smaller Irish market, and these savings may be passed on to retailers in Northern Ireland. While this may disadvantage some smaller retailers in the Republic, it seems unlikely to be the case for larger retailers such as the big supermarket chains. Any economies of scale achieved by the larger chains would be passed on to all members

---

[3] Transport costs are often cited as a cause of higher prices in Ireland compared to the UK. However, there is no reason for this to be an issue in comparing prices between the Republic and Northern Ireland. The transport costs of supplying a retail business in the Republic or Northern Ireland are likely to be similar. Some of the large supermarket chains transport the majority of their goods to Northern Ireland via the Republic.

[4] National Competitiveness Council, 2008, *Benchmarking Ireland's Performance.*

of that chain, regardless of whether they are based in the Republic or Northern Ireland. Therefore, differences in the costs of goods purchased from suppliers cannot explain the large differences found in the NCA study between the large supermarket chains but they may contribute to price differences for smaller retailers.

2.2 Taxes

Differences in tax rates between the Republic and Northern Ireland will influence the costs of running retail operations. This involves not just differences in VAT and excise, but also income tax, corporation tax and other taxes. Given the complexity of the interaction of the various taxes, the range of goods they apply to in each country and the differences in rates, there is little available evidence on the amount added to prices due to all taxes combined.[5]

There are differences in the VAT rates between Ireland and the UK (see Table 1). These differentials have widened since the increase in VAT in the Republic (from 21 to 21.5 per cent) and the temporary reduction in VAT in the UK (from 17.5 to 15 per cent) in the most recent Budgets of both countries.

Table 1: Main Republic of Ireland and UK VAT Rates

Republic of Ireland	**VAT Rate**	**UK**	**VAT Rate**
Standard rate	21.5%	Standard rate	15%
Reduced rate	13.5%	Reduced rate	5%
Zero rate	0%	Zero rate	0%

Source: Revenue and HMRC.

Although the direct impact of these changes on prices is not clear, it is likely to be relatively limited compared to the exchange rate fluctuations discussed in Section 2.4 and given the contribution of VAT to the retail price of goods and services. The rate of inflation in the UK has slowed in recent months, partly as a result of the Budget change, but this is at aggregate level and there has been speculation in the UK media on the extent to which the VAT reduction has been passed on to consumers. Inflation has also slowed considerably in the Republic, despite the VAT increase that took effect from 1st December 2008.

5 It should be noted that the NCA study quoted above is based on figures that exclude VAT and excise duty differences.

There are also differences in excise duty rates between Ireland and UK. A direct comparison is difficult given the range of different excise products and applicable rates but in general terms, excise on beer, spirits, wine and tobacco is higher in the Republic while duties on oils (petrol and diesel) are higher in the UK. For example, a recent (January 2009) Revenue survey of prices in the Republic and Northern Ireland found that a bottle of whiskey was €9.71 more expensive in the Republic, with excise duty accounting for €4.03 of the difference.

2.3 Profit Margins

A third factor that influences the differences in prices between the Republic and Northern Ireland are the profit margins achieved by retailers. Although there are differences in costs of goods, operating costs and taxes between the two jurisdictions (and exchange rate fluctuations discussed in the next section), they are not sufficient to explain the differences in prices found in the NCA study. The most likely explanation for the remaining prices differences is the profit margins (or mark-ups) applied by the retailers.

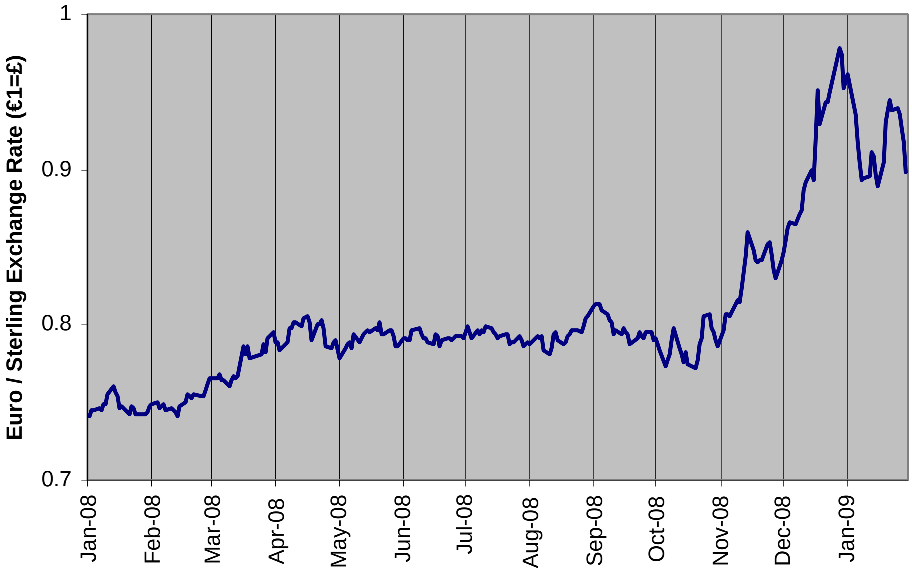
Available data on differences in profit margins between the Republic and Northern Ireland are limited. Few companies, in particular the large chains that operate in both jurisdictions, publish the differences in their margins. However, some information can be inferred for the level of price competition. The NCA study cited above also compares the degree of price variation between retailers in the Republic and Northern Ireland and finds evidence of more price competition between retailers in Northern Ireland than among the same retailers in the Republic. Price matching, rather than price competing, was found to be common among retailers in the Republic. This suggests that profit margins of the large supermarket chains are higher in the Republic, as less competition implies higher profits, and therefore is likely to be another factor in higher prices in the Republic.

2.4 Currency Fluctuations

The exchange rate between the Euro and Sterling is a key factor in the price differential between the Republic and Northern Ireland. In particular, the final quarter of 2008 saw a rapid depreciation of Sterling against the Euro (see Figure 1 below). Over the course of

2008, the Euro rose in value from £0.74 in January to £0.96 in December, an appreciation of 30 per cent. Sterling did strengthen in value in early January 2009 but has since fallen again.

Figure 1: Euro / Sterling Exchange Rate January 2008 to January 2009



Source: European Central Bank data and own calculations.

The result is that goods in Northern Ireland became relatively cheaper for Irish consumers. For example, buying an item priced £500 in January 2008 would have cost €675, by the end of the year the same item would have cost €510, everything else being equal. This has widened the price differentials found by the NCA in July 2008. Although the NCA has not published a full study on price differentials since July of last year, a more limited study in January 2009 suggests that the price differentials on some goods in the large supermarkets chains have risen to 50 per cent (from a previous high of 30 per cent in July 2008).

It is this sharp depreciation of Sterling that has focused increased attention on the potential for cross border shopping and the numbers of consumers from the Republic travelling to Northern Ireland. Given the magnitude of Sterling's depreciation, compared to the differences in tax rates and operating costs, it seems likely that the change in the exchange rate is the primary cause of the increase in the price differentials between the Republic and Northern Ireland in recent months

It should be noted that, in the longer term if exchange rates stabilise at current levels, there are likely to be benefits to retailers based in the Republic. The appreciation of the Euro has decreased the relative costs of goods imported into Ireland from countries outside the Eurozone. In particular, the UK is Ireland's largest importer, accounting for nearly one third of total Irish imports. Over time lower import costs should reduce the costs of goods purchased by retailers in the Republic and the final sales price if those reductions are passed on consumers.

3. Estimating the Loss to the Irish Exchequer

This section presents estimates of the extent of cross border shopping in Northern Ireland and the resulting loss to the Irish exchequer. The focus is on VAT and excise duty revenue, as these are the taxes directly affected by cross border shopping.[6] The effect on corporation tax revenue is also considered. There are also less direct implications for income tax and other taxes as a result of business and income lost as consumers spend less in the Republic, however estimation of such effects is beyond the scope of this report.

The following sections present the approach used but first Section 3.1 notes several issues that should be borne in mind when considering any estimates of cross border shopping.

3.1 Factors Influencing Estimates of Cross Border Shopping

While there is plenty of anecdotal evidence from the media and trade groups, there is little quantifiable data available to analyse the true extent of cross border shopping and the implications for the Irish exchequer.

For example, the Experian Footfall Survey of retail locations in the UK and Ireland shows that, while visitor numbers to retailers in the Republic were generally lower in late 2008 compared to 2007, numbers in Northern Ireland were actually higher.[7] Northern Ireland goes against the general trend from the economic downturn in the Republic and the UK. It seems reasonable to assume a share of this must be due to cross border

[6] In addition to VAT and excise losses, there may also be a loss in customs duty due to increased cross border shopping as certain goods bought from non-EU countries would be liable for customs duty. The loss in revenue to the exchequer is likely to be minimal as the amounts involved are small and a large share of customs duties are paid by member states to the EU.
[7] See http://www.footfall.com/ for more details on the Experian Footfall Survey.

shoppers from the Republic. While this finding is indicative of a rise in cross border shopping, it is of little use in attempting to measure its extent or impact on tax revenue for several reasons. These reasons should be borne in mind when examining the exchequer loss due to cross border shopping and are discussed in more detail in this section.

3.1.1 Cross Border Shopping Is Not A New Phenomenon

Cross border shopping has been a feature of the Irish economy for many years but there has been little attempt to measure its size or its impact on tax revenue in the past. The level of shoppers going north may have increased in recent months but without knowing the baseline figure of tax revenue lost due to cross border shopping in the past makes it difficult to place in context the effect of the recent increase. There are no accurate measures of how sensitive households are to price differentials and to what extent they are likely to have changed their behaviour in light of recent price changes.

The only previous study on cross border shopping of significant size and rigour was based on a survey by the ESRI (1988).[8] The summarised results from this survey are shown in Table 2 which indicates the share of expenditure by households in the Republic that was spent on goods in Northern Ireland. The study estimates that the value of cross border shopping was in a range of IR£150 million to IR£250 million in 1986.

Table 2: Estimates of the Share of Expenditure of Irish Households in Northern Ireland

Item	**Estimated Share of Expenditure in Northern Ireland**	**Item**	**Estimated Share of Expenditure in Northern Ireland**
Food	0.7%	Ladies' clothes	0.5%
Other groceries	4.4%	Gents' clothes	1.2%
Petrol	1.1%	Toys	9.2%
Beer	3.4%	TV/video	0.9%
Spirits	3.4%	Electric	3.4%
Wine	0.4%	Non-electric hardware	2.6%
Tobacco	0.8%		

Source: Table 4.2 in Fitz Gerald et al. (1988).

[8] Fitz Gerald, J. *et al.* (1988), *An Analysis of Cross Border Shopping.*

Fitz Gerald (1992) tentatively estimates that the resulting tax revenue loss to the Irish exchequer was IR£100 million in 1986.[9] This is a relatively high figure, given the estimated size of cross border shopping, and it is not clear whether it includes only consumption taxes or also other taxes.

It is important to note that the survey was undertaken in 1986. This was a period of severe and consistent appreciation of the Irish Punt against Sterling and that year marked the highest exchange rate reached for the entire decade of the 1980s. For this reason, the level of cross border shopping in 1986 was not likely to represent a long-term baseline of activity and should be viewed in that context.

It is also worth noting that the retail trade sector accounted for a much larger share of VAT revenue in 1986 compared to the present day and therefore VAT revenue as a whole would have been more susceptible to changes in this sector due to cross border shopping.

3.1.2 The Irish Economy Is Experiencing A Severe Downturn

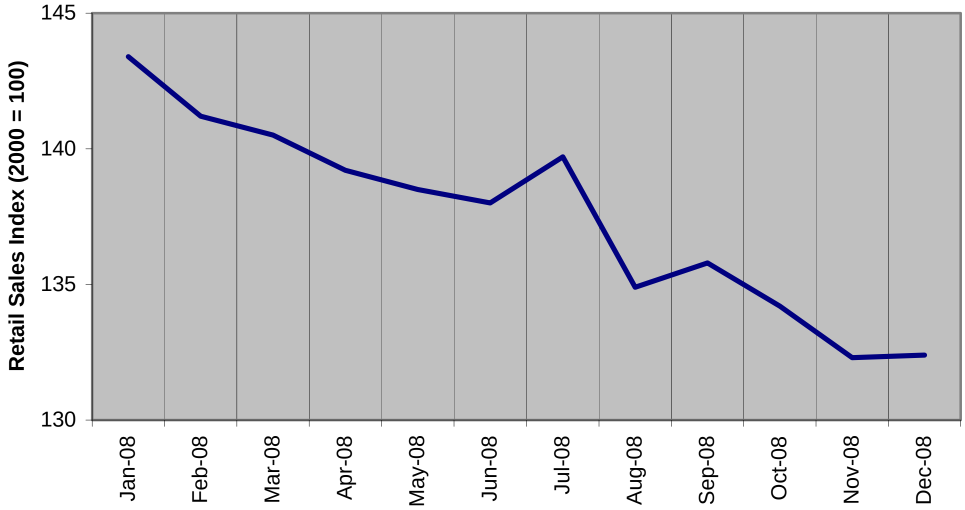
The increase in cross border shopping is occurring at a time of significant contraction in the Irish economy due to the effects of the global financial crisis and the collapse of the domestic property market. The result is that it becomes increasing difficulty to isolate a relatively small factor, such as cross border shopping, and identify its effects in midst of a broader downturn. Cross border shopping has likely impacted negatively on the Irish exchequer in terms of tax revenues but it is only one of many factors to do so.

The Central Statistics Office's (CSO) Retail Sales Index survey measures the change in the value of sales per month in Ireland as shown in Figure 2. The effect of the economic downturn in 2008 on retail sales is clearly visible, with a particularly strong negative impact in the most recent month for which data are available: retail sales in November 2008 were 6.8 per cent lower than the same month in 2007. At the sub-sectoral level, the CSO figures show that among the hardest hit sub-sectors within the retail sales sector are: furniture and lighting; motor trade; and electrical goods.

---

[9] Fitz Gerald, J. (1992), *Effects of Taxes on Trade in Border Areas.*

Figure 2: Seasonally Adjusted Value of Retail Sales Index 2008



Source: CSO data.

The CSO retail sales figures show the impact of the downturn in consumer spending but they also illustrate the fact that there will be considerable "background noise" when attempting to isolate the effect of one event such as cross border shopping from the general trend in the economy.

3.1.3 Would Irish Households Have Spent the Same Amounts in the Republic?

Assuming that any increase in spending by Irish households in Northern Ireland results in an equal loss to the Irish economy may be simplistic. Households would face higher prices in the Republic (their reason for cross border shopping) and this would likely lead them to change their spending. Accurately modelling the price sensitivity of households and the implications for tax revenue is complex. For the purpose of this exercise it is necessary to assume that a Euro more spent in Northern Ireland is a Euro less spent in the Republic but this is a simplification of reality.

3.2 Estimates in the Extent of Cross Border Shopping

The CSO has made estimates of the overall level of cross border shopping by households from the Republic in Northern Ireland. A broad range is given for these estimates owing to the absence of firm comprehensive data sources. They reflect an approach of making the best possible use of a number of disparate pieces of information in order to arrive at an overall estimate. A combination of market research data provided by TNS-Worldpanel was used together with other estimates and some technical adjustments related to this matter.[10] The broad approach was to base the estimates on the cross border shopping by households from the Republic with the Northern Ireland based supermarkets of J Sainsbury and ASDA where reasonably reliable data was obtained from TNS-Worldpanel. These outlets have no presence in the Republic although they are included in the TNS survey of shoppers in the Republic. The estimates were then grossed up to reflect additional cross border shopping at other supermarket chains in Northern Ireland that could not be directly identified in the TNS survey. These estimates were further adjusted with very tentative estimates of cross border shopping for furniture, electrical goods, clothing and baby items.

In summary (see Table 3), total cross border shopping by households from the Republic in 2008 is estimated to be in the range €350 million and €550 million in 2008. If a relatively constant exchange rate of €1 = £0.90 continues in 2009 and if the spending patterns observed in late 2008 persist throughout the year (with normal seasonal variation), the CSO have made an estimate to end 2009.

Table 3: Estimates and Forecast of Value of Cross Border Shopping

Year	Estimated Value of Cross Border Shopping
2007	€210 million to €340 million
2008	€350 million to €550 million
2009	€450 million to €700 million

Source: CSO calculations.

Note: 2009 forecast based on an exchange rate of €1=£0.90 and a continuation of 2008 spending patterns.

Additional information was obtained separately by CSO from some supermarket chains in the Republic in relation to the increase in the amount of trade lost to the North between 2007 and 2008 as a result of cross border shopping. This information supports or provides some validation for the original estimate of between €350 million and €550 million in 2008 as compared with a range of €210 million and €340 million in 2007.

It should be noted that these estimates do not include any figures on the purchases of vehicles in Northern Ireland for importation in the Republic. Nor is the counter flow of

[10] For more information on TNS-Worldpanel, see http://www.tnsglobal.com/market-research/fmcg-research/consumer-panel/. The TNS survey was carried out on a regular and ongoing basis throughout 2008 and therefore the results should reflect the effects of the fluctuations in the Sterling exchange rate in late 2008 and the change in VAT rates in the UK and Ireland that took effective from 1st December 2008.

consumers from Northern Ireland purchasing petrol and diesel in the Republic considered.

3.3 Estimating the Implications for Tax Revenue

3.3.1 Tax Revenue in 2008

The total net VAT revenue collected in 2008 was €13,429 million, of which revenue from the retail trade sector was €1,831 million (14 per cent). Although VAT revenue has been quite severely impacted by the slowdown in the Irish economy in 2008 (total VAT revenue was 7 per lower than the previous year), revenue from the retail trade sector was 0.1 per cent higher than 2007. However, this aggregate figure for the year as a whole disguises a fall in VAT revenue from the sector in the later months of 2008.

Similar to VAT revenue, total excise duty revenue in 2008 was 7 per cent lower than the previous year, decreasing from €5.84bn in 2007 to €5.44bn in 2008. Around 70 per cent of the fall in excise duty was due to the decrease in car sales and the subsequent impact on VRT. Excise duty excluding VRT was only 3 per cent lower than 2007 although this was mostly due to small decreases in oils and tobacco. The fall in the volume of consumption was greater for most of alcohol products: beer (-5.4 per cent), spirits (-7.8 per cent), wine (-5 per cent) and cider (-11.1 per cent).

The decrease in both VAT revenue and excise duty reflects the downturn in the economy more broadly. From the available tax revenue data it is not possible to directly estimate the contribution of cross border shopping to the fall in revenue.

3.3.2 Tax Revenue Loss Due to Cross Border Shopping

For VAT and excise duty, the question remains as to what share of the fall in revenue is a result of cross border shopping as opposed to the general downturn in economic activity. Using the CSO estimates shown in Section 3.2, Revenue has calculated the loss in VAT and excise that arises.

The calculations are based on the assumption that expenditure by Irish households in Northern Ireland would have instead been spent on the same goods and services in the Republic. CSO household spending data are used to estimate the split of the spending by product to identify the most accurate VAT and excise rates. For example, because the rate of VAT applied to most food products is zero, cross border shopping for such goods does not result in a VAT loss to the Irish exchequer.

The results are shown in Table 4. The VAT lost in 2008 based on the higher estimate is €56 million (0.4 per cent of total VAT revenue). The higher estimate figure for excise is €34 million or 0.6 per cent of the total excise duty in 2008.

Table 4: VAT and Excise Duty Revenue Lost Due to Cross Border Shopping

Year	Estimate of Cross Border Shopping	Estimate of VAT Revenue Lost	Estimate of Excise Duty Lost	Total
2007 – lower estimate	€210 million	€21 million	€12 million	€34 million
2007 – higher estimate	€340 million	€34 million	€19 million	€54 million
2008 – lower estimate	€350 million	€36 million	€22 million	€58 million
2008 – higher estimate	€550 million	€56 million	€34 million	€90 million
2009 – lower forecast	€450 million	€46 million	€26 million	€72 million
2009 – higher forecast	€700 million	€72 million	€40 million	€112 million

Source: CSO data and Revenue calculations.
Note: due to rounding total figures may not match sum of the VAT and excise figures.

The effect of cross border shopping on VAT and excise revenues is the main source of loss to the Irish exchequer. There are also less direct implications for corporation tax, income tax and other taxes as a result of business and income lost as consumers spend less in the Republic. Full estimation of such effects is beyond the scope of this report, however the effect on corporation tax revenue is estimated to provide an indicative measure of the potential loss.

From a corporation tax perspective, there are added difficulties in estimating the loss of revenue from cross border shopping.[11] Corporation tax is levied on profits rather than income. Had the expenditure on cross border shopping instead been spent in the Republic, this would have increased the income of retailers in the Republic, for example in 2008 by between €350 million and €550 million. A worst-case scenario, from the corporation tax revenue perspective, is to assume that the entire amount would have translated into taxable profit and is therefore taxable at 12.5 per cent. However, it is overly simplistic to assume that all additional expenditure would represent increased taxable profit. Based on some assumptions regarding profit to turnover ratios in the retail

[11] This assumes that all affected traders are incorporated, which is probably not accurate, but it simplifies the calculations required.

trade sector, Table 5 shows a provisional estimate of the potential corporation tax revenue loss from cross border shopping. For 2008, the estimated loss of revenue is between €15 million and €24 million, which would equal 0.3 per cent and 0.5 per cent of total corporation tax revenue in 2008.

Table 5: Corporation Revenue Lost Due to Cross Border Shopping

Year	Estimate of Cross Border Shopping	Estimate of Corporation Tax Revenue Lost
2007 – lower estimate	€210 million	€9 million
2007 – higher estimate	€340 million	€15 million
2008 – lower estimate	€350 million	€15 million
2008 – higher estimate	€550 million	€24 million
2009 – lower forecast	€450 million	€20 million
2009 – higher forecast	€700 million	€31 million

Source: CSO data and Revenue calculations.

4. Conclusion

This report estimates the implications for the Irish exchequer of cross border shopping. It begins by examining the causes of the price differentials between the Republic and Northern Ireland. It is clear that the major causes of price differentials are costs, profit margins and the rapid depreciation of Sterling against the Euro. Changes in VAT rates have widened the price differentials but they remain small compared to the change in the exchange rate. Cross border shopping is likely to remain an issue as long as Sterling remains weak again the Euro.

There are significant difficulties associated with quantifying the extent of cross border shopping and estimating the implications for the Irish exchequer. In particular, the availability of quantifiable data on which to base any estimate of cross border shopping is extremely limited. Nevertheless, this report presents some initial estimates of cross border shopping by the CSO. The approach makes the best possible use of a number of sources. A combination of market research data provided by TNS-Worldpanel was used together with other estimates and some technical adjustments. Based on the results, the tax revenue implications are then estimated by Revenue.

The estimated value of cross border shopping is in the range of €350 million to €550 million in 2008 (broad ranges are given for all estimates of cross border shopping and the resulting tax losses in this report). As noted in earlier sections of the report, cross border shopping in Ireland is not a new phenomenon. Taking the year 2007 as a measure of baseline activity, the estimates for cross border shopping in 2008 represent an increase of between €140 million and €210 million. If the exchange rate remains at close to current levels and if the spending patterns observed in late 2008 persist throughout 2009 (with normal seasonal variation), it is estimated that cross border shopping will increase by a further €100m to €150m this year compared to 2008.

The resulting VAT and excise duty revenue loss to the Irish exchequer is estimated to be between €58 million and €90 million for 2008, an increase of €24 million to €36 million compared to 2007. Using the forecast of cross border shopping for 2009, the tax revenue loss on VAT and excise is estimated to be in the range of €72 million and €112 million this year (between €14 million and €22 million more than 2008). The higher estimates for 2008 equal around 0.4 per cent and 0.6 per cent respectively of total VAT and excise duty for the year.

In addition to the VAT and excise loss, there is a possible corporation tax revenue loss that is tentatively estimated to be in the range of €15 million to €24 million for 2008 (between €6 million and €9 million higher than 2007). This represents between 0.3 per cent and 0.5 per cent of total corporation tax revenue in 2008. The forecast for 2009 is that the corporation tax loss will be between €20 million to €31 million. However, it should be noted that all estimates for corporation tax revenue losses are provisional and should only be considered as indicative of the potential loss.

For future work on this subject, the best option to measure the loss in tax revenue to the Irish exchequer would be a survey of cross border shoppers. This would identify the numbers travelling, the amounts spent and the goods bought and this data could then be used to extrapolate the results for the population as a whole and the implications for tax revenue. Revenue is working with the CSO to include a series of questions in the upcoming Quarterly National Household Survey in Quarter 2 of 2009. When available in Quarter 3, the results should provide data that will enable a more detailed assessment of the impact of cross border shopping. This will also serve to provide a validation of the initial results and address the primary constraint on the estimates contained in this report which is the limited availability of quantifiable data on cross border shopping.