Economic Impact of the Reduction of the VAT Rate

On the

Restaurant Sector

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1. Introduction and Background

As part of the Government's Jobs Initiative of May 2011, a reduction in the lower rate of VAT from 13.5% to 9% was introduced for a range of categories including supply of food and drink excluding soft drink (restaurants and caterers). This lower rate took effect on 1st July 2011 and was to last until December 2013. The maintenance of the measure into 2013 was dependent on a review of its impact before the end of 2012. This review was favourable and the measure was continued into 2013. The Restaurants Association of Ireland (RAI) has argued that the VAT reduction has had a substantial positive economic effect on the restaurant sector and should be retained beyond December 2013.

The purposes of this report are to examine the economic impact of the VAT reduction using currently available data and, based on this analysis, to make a recommendation on the retention or otherwise of the lower VAT rate of 9% for the restaurant sector.

The *Jobs Initiative* states that the objectives of the reduction in VAT are …"to boost tourism and stimulate employment in the sector…" (*Jobs Initiative, May 2011*). At the time of its introduction the Minister for Transport, Tourism and Sport made clear that commercial operators must pass on the benefit of the lower VAT rate to consumers in lower prices. He noted that the measure was aiming to lower costs, improve competitiveness and create jobs.

Since the reduction of the VAT rate to 9% the VAT rate on alcohol serving has been increased from 21% to 23% from January 2012 and excise on alcohol has been increased substantially from December 2013. These tax increases have negatively impacted on restaurant alcohol prices. The full food serving VAT reduction is equivalent to a 4% price reduction on meals. The tax increases on wine increased the price of a €25 bottle by 5.6%. An €80 meal for 2 would reduce by €3.2 due to the VAT reduction but a €25 bottle of wine with the meal would increase by €1.4 due to the alcohol tax increase, resulting in only a €1.8 reduction on the €105 total cost or 1.7%.

The Department of Finance carried out a review of the measure which was published in November 2012 with the *Medium- Term Fiscal Statement* and was also published in Administration (*O'Connor, B. vol. 60 no. 4 2013*).

Evaluation of the VAT reduction measure's impact on the restaurant sector is constrained by the limited availability of empirical data. For example disaggregated quarterly employment data is available at the two digit NACE classification. Restaurants are contained in the classification I accommodation and food services which is the category used in the Department of Finance evaluation. The main elements in this are classification are NACE 55 accommodation, 56.1 restaurants and mobile food activities, 56.2 event catering and 56.3 beverages serving. Pubs and other bars are included in the beverages serving activities. Food constitutes a substantial part of the overall pub/bar economic activity but alcohol serving remains the dominant element. Alcohol serving in pubs has declined substantially over recent years with consequent declines in the associated employment related to alcohol beverage serving. (*Foley, A. 2012 and 2013).* Employment performance in the food and beverage serving category is composed of the continuing decline in drinks related employment and the possible positive impact of the VAT reduction on food serving in pubs. Employment data for restaurants as a separate category is not available from the QNHS.

In addition to specific data problems there is also the issue of isolating the impact of the VAT change from the many other economic factors. For example the VAT reduction could have a positive impact on economic activity and employment in the restaurant sector but other negative impacts such as increased input costs or weak discretionary income could outweigh the positive impact and result in the sector exhibiting overall price rises or employment declines. Ideally a full econometric model would be used to isolate the different influences but this is beyond the resource constraints of this report and would also face data difficulties.

The next section identifies the economic context which is important for consideration of the overall strategy. The VAT reduction was intended to boost economic activity and employment in an overall situation of weak economic activity and high unemployment. An alternative economic context of high growth and low unemployment would reduce the need to stimulate employment by this measure or other specific measures. As shown in section 2, economic activity is expected to be relatively weak in 2014 and beyond and unemployment will remain high. After 2013, there will still be a need to stimulate economic activity where possible.

Section 3 outlines the economic contribution and labour intensity of the restaurant sector. It shows that the sector is a source of substantial economic activity and employment, is very labour intensive and uses domestic inputs to a substantial extent. This makes it a very desirable sector to be targeted for economic stimulus.

Section 4 examines the different mechanisms through which the VAT reduction could affect economic activity. Section 5 measures the economic impact within the constraints set by the data limitations and the overall conclusion and recommendation are presented in Section 6.

2. The Economic Context

The VAT reduction was introduced as an economic stimulus/job creation measure in light of the prevailing and expected weak economic situation. Actual economic growth as measured by GDP was 0.9% in 2012. This is lower than the increase of 1.4% experienced in 2011 and follows decreases of 2.1% in 2008, 5.5% in 2009 and 0.8% in 2010. Real GNP growth outperformed GDP in 2012 when real GNP increased by 3.4%. Real consumer expenditure which is a major determinant of restaurant activity declined by 0.9% in 2012 and declined by 2.4% in 2011. The nominal monetary value of total consumer expenditure increased by 0.8% in 2012 following declines in the previous three years. National employment declined by 0.6% in 2012 compared with 2011 and the average 2012 unemployment rate was 14.7% compared to 14.6% in 2011. Disposable and discretionary incomes remained under severe pressure. These negative economic factors contributed to the continuing substantial decline in the on-licence sector.

The GDP growth expectations for 2013, 2014 and 2015 are shown below. Generally 2013 is expected to be better than 2012 based on current assessments. The main issue with regard to the possible extension of the 9% VAT rate beyond December 2013 in terms of economic conditions relates to 2014. A further improvement is expected in 2014 and 2015 but the growth rates will remain relatively low while much better than 2011 to 2013. The 2014 macroeconomic performance will be well below the levels which would remove the need for specific stimulus measures where possible. The range of forecasts is shown in table 2.1 below.

Table 2.1 GDP growth projections to 2015 and outturn 2011 and 2012.

	2011	2012	2013	2014	2015
Outturn	1.4	0.9			
NERI			1.0	1.2	2.0
Govt			1.5	2.5	2.9
CB			1.2	2.5	-
EU			1.1	2.2	-
IMF			1.1	2.2	2.7
OECD			1.3	2.2	-
ESRI			1.3	2.3	
NCB			1.2	2.0	2.2

Source. NERI Table 3.2 April 2013 Quarterly Economic Observer

Consumption volume performance will be weaker than the GDP growth. The Governments consumption volume projection for 2014 is +1.0% and +1.2% in 2015. The unemployment rate will improve a little in 2014 compared with 2013 and 2012 but will still be around 14%. The overall level of employment is expected to increase a little in 2014.

Based on current expectations, which could be revised downwards, 2014 will provide a better economic environment than 2011 to 2013 but growth will still be low, well below desired levels and below potential growth, unemployment will remain high and employment growth will be small. Despite the improvement, the economy in 2014 will still lag behind the required levels of growth and there will be a continuing need for economic stimulus where feasible. The economic situation in 2014 will not support the removal of stimulus measures such as the lower VAT rate of 9%.

3. Economic Contribution of the Restaurant Sector

The restaurant sector is large in terms of enterprises, economic activity and employment. As such it is an appropriate sector at which to target economic stimulation measures. It is also very labour intensive and uses a substantial amount of locally produced inputs. Dining out is a major element of the tourism package and measures to improve price and competitiveness in this sector contributes to overall tourism competitiveness. Of course, these are the reasons why the sector was included in the 9% VAT economic stimulus measure and why it was already included in the 13.5% lower rate. It is useful to identify these desirable "stimulus friendly" features of the restaurant sector.

There are several sources of restaurant employment but none are up to date. The most up to date source is the CSO QNHS which unfortunately combines restaurants with other food caterers and beverage serving in public houses and bars. Despite the differences, all the sources indicate that restaurants employ a substantial number of persons.

The most recent CSO employment data show that food and beverage serving activities accounted for 72.7k persons in Q4 2012 (NACE classification 56). However, as already noted, this classification includes beverage serving in public houses and other bars.

The 2011 census of population reports that 35.0k persons were employed in restaurants and mobile food services in April 2011 (classification 561). Event catering and other food service activities provided 9.9k jobs. Bars provided 21.5k jobs. The three sub categories of classification 56 generated a total of 66.4k persons in April 2011 compared to the QNHS Q2 2011 total of 76.4k persons. However the two sources refer to different data collection methodologies and definitions. Nonetheless the census data show that restaurants employed 35k persons in April 2011. In addition a substantial proportion of public house/bar employment is food serving related.

The 2010 Failte Ireland Tourism Employment Survey report that licensed restaurants employed 38.7k persons in both full and part-time positions and another 14.3k persons were employed in non-licensed restaurants. According to the Failte Ireland data the total restaurant employment in 2010 was 53.1k persons. This is much higher than the 2011 census figure of 35.0k persons.

The Annual Services Inquiry by the CSO provides a range of financial and employment data for the restaurant sector. In 2010, which is the latest year available, restaurants and mobile food services (classification 561) employed 48.4k persons and accounted for a turnover of €2.3 billion and a wages bill of €684 million. The labour intensity of the sector is apparent by wages accounting for 29.3% of turnover and turnover per person of €48.2k.

The different employment estimates for the restaurant sector are shown below:

QNHS Q4 2012 includes restaurants, food catering and pubs/bars	72.7k
Census of Population April 2011 restaurants / mobile food services	35.0k
CSO Annual Service Inquiry 2010 restaurants/mobile food services	48.4k
Failte Ireland 2010 licensed and non licensed restaurants	53.1k

As noted above the restaurant sector had a turnover of €2.3 billion in 2010. According to the monthly services value index of the CSO, the value of NACE classifications 561 (restaurants and mobile food services) and 562 (event catering and other activities) combined increased by 2.8% in 2011 and 6.9% in 2012, a combined 9.9% increase since 2010. The application of this increase to the 561 classification turnover in 2010 results in a 2012 restaurant turnover of €2.5 billion.

The restaurant sector makes a substantial economic contribution. It accounts for employment of between 35k and 53k persons and has a turnover of about €2.5 billion. According to the 2010 Annual Services Inquiry there were 6044 enterprises in the restaurant and mobile food service classification.

4. Economic Impact Mechanisms

As noted above, the Government's expectation was that the VAT reduction would be passed on to consumers in lower prices. This would increase demand and would generate higher employment in the sector. The scale of the eventual employment impact depends on the extent of the pass through in price reductions, the price elasticity of demand for restaurant meals, (the more price elastic is demand for restaurant meals the higher will be the increased demand arising from the price reduction) and the impact of increased restaurant production on employment levels.

Even if the above mechanism did not arise, there could still be economic gains from the VAT reduction. With unchanged prices the lower VAT rate would improve the commercial sustainability of restaurant enterprises through increasing profits or reducing losses, and avoid or reduce the number of future business collapses. In other words the reduced VAT rate could be used to improve operating margins. The improved margins could result in jobs being retained that would otherwise be lost through contraction or closure. However, this is not what was expected of the VAT reduction measure. Prices were to be reduced which would increase demand and generate increased output and employment.

A distinction has to be made between gross and net effects. As well as the positive effect of the reduced VAT rate, the restaurant sector has suffered the negative influences of in creases in input costs, reductions in overall consumer demand, changes in consumer behaviour, knock-on effects of households dealing with debt levels and lower levels of discretionary income due to earnings controls and tax effects.

A notable example of the negative effects is the recent changes in indirect tax levels on alcohol. A substantial part of restaurant revenues arises from alcohol sales. Alcohol sales are subject to the full VAT rate. In January 2012 the VAT rate on alcohol was increased from 21% to 23% and in December 2012 there were substantial increases in alcohol excise, including over 40% for wine. These two effects reduce the continuing positive effect of the VAT reduction from 13.5% to 9% for food serving because a large proportion of meals out are consumed jointly with alcohol and especially wine. Both of the negative tax effects occurred after the July 2011 VAT reduction.

Alcohol sales in the licensed restaurant sector are about 30% of revenue and wine is about 70% of the alcohol sales.

The observation of employment levels and prices in restaurants before and after the VAT reduction must take into account the impact of other negative factors. What is observed is the net effect of the various influences on employment and on prices. This is a combination of the gross effect of the VAT reduction and the gross effect of negative other factors. A full pass-through of the price reduction may not result in an observation of a full pass through because of, for example, a simultaneous increase in input costs.

It is unlikely there would be a 100% pass-through on price. In other words it is unlikely that all restaurants would pass on the full VAT reduction in lower prices. This expectation is based on theoretical grounds and on international experience. Some restaurants will use the VAT reduction to improve margins or to move from loss to positive margins. Some restaurants will be performing adequately and will not feel the need to lower prices. Some will use the VAT reduction as an opportunity to avoid a pending price increase. In a perfectly competitive market one would expect competitive market forces to ensure that all restaurants passed on the full impact of the VAT decrease. However, the restaurant market is not perfectly competitive. It is imperfectly competitive and is characterised by product and service differentiation which results in some ability to resist a market determined passing on of the VAT reduction.

International experience also suggests that the full impact of a VAT reduction is not passed on as a price decrease. There are cases of very small rates of pass-through.

There are various international estimates of the price elasticity of restaurant meals. This measures the percentage change in quantity demanded resulting from a percentage change in price. The larger is the elasticity, the greater is the percentage demand response to a price change. Anderson et al (1997) reported a price elasticity of 2.3 for restaurant meals. Houthakker and Taylor (2007) report a value of 1.6. However, a study for the Maltese Ministry of Finance refers to a value of 0.8. The consensus is that price elasticity for restaurant meals is well above 1.

The employment impact, measured by number of people, arising from an increase in demand will be significantly less than proportionate. In other words a 3% increase in demand will result in less than a 3% increase in the numbers employed. Research by Copenhagen Economics (2007) reports an employment response to output of between 0.3 and 0.7 in the short-term and 0.5 to 0.9 in the long-term. The report also reports that restaurants have a relatively high employment response.

5. Measuring the Economic Impact

O'Connor (2013) assessed the impact of the reduced VAT rate on prices and employment. Our concern is with the restaurant sector but data constraints prevented a full examination by O'Connor of the restaurant sector's employment response. O'Connor noted with regard to prices that "…clear evidence of (price) pass-through occurred in the following series

Meals out

Hairdressing

Admissions to cinemas, theatres etc

Newspapers

Between June 2011 and December 2011 meals out prices dropped by 1.5%, between January and June 2012 there was a 0.1% increase giving a June 2011 to June 2012 decrease of 1.3%. If the full effect of the VAT reduction was passed on the price decrease would have been 4%. O'Connor notes that the partial pass through of the meals out VAT reduction….."….could have been reflective of the interaction between upward cost pressure due to rising food prices and pass-through of the lower VAT rate. It appears that some of the rate reduction was offset by higher input food prices" (page 174). In addition, between June 2011 and December 2011 electricity prices increased by 11.5% and gas by 16.3%. Utilities and local charges as a single group increased by 7.9% over the same period. The O'Connor evaluation does not take the VAT increase on alcohol serving into account.

On the assumption of no other price changes one would expect that as soon as the VAT rate was reduced restaurant prices should have decreased by 4% if there was a full pass-through. As noted above other prices and costs did not remain constant. Consequently, the lower than 4% price decrease is not a reflection of a limited pass-through but is the net effect of various price increases and decreases. A survey of RAI members involving 89 participants showed that 96% of respondents passed on the VAT decrease of July 2011. 100% of respondents reported that a VAT increase would have negative effects on the business and employment.

In retrospect, a detailed evaluation methodology should have been established at the introduction of the measure which would have allowed detailed examination of the different cost and price influences on a sample of restaurants before and after the VAT reduction. The same comment applies to other sectors.

The O'Connor evaluation examined the employment impact in so far as the data allowed. The available employment data referred to NACE sector I "accommodation and food services". The evaluation identified that employment in this classification increased by 6.200 persons between Q2 2011 and Q2 2012, an increase of over 6%, from 108.3k to 114.5k. The evaluation concludes that…"there appears to be reasonable evidence of the desired employment impact in the "accommodation and food services" sector. The evaluation argues that the broad pattern of employment change would have been a decline of between 2% and 3% compared with the above mentioned increase of over 6%.

The CSO have since revised the employment levels for various periods due to the census of population. The current Q2 2011 level is 114.4k and the Q2 2012 level is 120.0k. The new increase is 5.6k which is close to the evaluation level of 6.2k. However, there are some qualifications to the use of this data and the evaluation's conclusion. The employment data refer to full and part-time jobs. Consequently the change in the number of persons is not equivalent to the change in the volume of employment. Secondly, we are concerned with the restaurant sector and the evaluation classification includes accommodation, restaurants, food catering and bars and pubs.

The CSO has unpublished data which separates accommodation from the rest of NACE sector I (food and beverage serving). Unfortunately it is not possible to distinguish between food serving in restaurants from event catering and beverage serving. The revised aggregate sector I data are shown in Table 5.1

Table 5.1 Employment Q2 2011 and 2012 Accommodation and Food and Beverage serving (k persons)

sector	Q2 2011	Q2 2012	Change
Accommodation and food services (including bars)	114.4	120.0	+5.6

Source. Unpublished data supplied by CSO

The above data cover the same period as the O'Connor evaluation and uses the revised data. (The distribution between full and part-timers is not known.) The combined 5.6k persons increase is composed of an increase in accommodation employment, a likely increase in restaurant employment, an unknown performance in event catering and a probable decline in pubs /bars employment related to alcohol serving. There was a decline in bar employment over the period due to the substantial decline in the volume of bar alcohol sales. Unfortunately, employment levels in each of these sectors are not available.

Between June 2011 and June 2012 retail sales volume in bars declined by 5.3%. The alcohol sales volume decline was probably greater at about 6%. This would have caused a decline in alcohol serving related employment over the period.

The detailed CSO employment data show that the increase of 5.6k persons was made up of an accommodation increase of 7.6k and a decrease in the combined restaurant, event caters and pubs sector of 2k. The data are somewhat surprising. The accommodation employment increase is 20% between Q2 2011 and Q2 2012. However, the Monthly Services accommodation index reports only a 2% increase between 2011 and 2012.

The RAI survey reported that 80% of respondents had increased staff by an average of 1 full-time and 2 part-time additional staff. The RAI represent about 13% of the total population of restaurants. Clearly the employment increase shown by the survey is not replicated across the sector. If it was, restaurant employment would have increased by over 16k persons. The RAI possibly represent the larger independent licensed restaurants.

An alternative method of estimating the employment impact is to apply values to the price/demand/employment response mechanism. On the assumption of a 70% pass-through, price would have dropped by 2.8%. On the assumption of a price elasticity for restaurant meals of 1.5, the increase in demand would have been 4.2%. On the assumption of a 50% response in employment to the demand increase, the employment impact would have been 2.1%. Based on assumed employment of between 35k and 53k, the restaurant employment increase associated with the VAT reduction would have been about 700 to 1100.

A more optimistic set of assumptions as regards employment creation would be an 80% pass- through on price reduction, a price elasticity of 1.8 and a 50% employment response. These would lead to between 1000 and 1400 new jobs.

A different, and more pessimistic, set of assumptions such as price pass- through of 60%, price elasticity of 1.3% and an employment to demand relationship of 50% would have generated an additional employment of between 550 and 820.

These figures relate to new jobs created from the price reduction/increased demand/increased employment mechanism. In addition where the price was not passed on in full, it will have improved the commercial sustainability of some existing restaurants which otherwise would have ceased trading. The VAT reduction has therefore contributed to the retention of existing employment and prevented job losses. For every 100 restaurants continuing in business because of the VAT reduction's contribution to operating margin, 800 jobs would be preserved based on the average size of restaurant in the Annual Services Inquiry.

6. Overall Assessment of the VAT Reduction and Recommendation

In July 2011 the Government reduced the VAT rate on restaurant food services from 13.5% to 9%. This reduction was reviewed in light of the 2012 Budget and was maintained until December 2013. The Government has yet to decide on extending the reduction beyond December 2013.

The recommendation of this analysis is that the reduced rate of VAT of 9% for restaurants should be maintained for a two year period 2014 and 2015 during which there should be a detailed empirical review of its effect.

The justification for the extension recommendation is based on the likely macroeconomic environment in 2014 and 2015, the likely employment and unemployment situation in 2014 and 2015, the economic contribution of the restaurant sector in providing between 35k and 53k jobs, the labour intensity of the sector and the evidence that the reduction has generated a partial pass –through in price reduction and has increased employment. The measure has enhanced tourism competitiveness which sector will play a major role in economic recovery. In addition, the Exchequer should be in a position to afford the continuation of the measure because of the budgetary benefits associated with the promissory note restructuring and the extension of the repayment period of the EU/Euro zone loans.

The overall macroeconomic environment will improve in 2014 compared with 2013 but growth will remain low and lower than desired and potential levels. Unemployment will remain high in 2014. Despite the economic improvement, there will still be a need where possible for Government to implement stimulatory measures for 2014 and 2015. In particular the economy and the restaurant sector will not be sufficiently robust to absorb the ending of the measure.

The restaurant sector is a large economic activity with about 6k enterprises and providing between 35k and 53k jobs. It purchases a large amount of domestically produced inputs. For these reasons it is an appropriate sector for stimulation measures.

The measure was introduced to stimulate a large labour intensive sector. However, subsequent tax measures such as the increase in VAT from 21% to 23% and the alcohol excise increase have had a negative competitive impact on the licensed restaurant sector where alcohol is served with meals. Restoration of the 13.5% VAT rate for food serving in restaurants would leave the sector worse off that in pre July 2011 due to the later alcohol tax increases. Such an outcome would appear to contradict Government policy as presented in the Jobs Initiative. The alcohol tax increases have eliminated much of the price reduction gain for dining out arising from the 9% VAT rate.

The Department of Finance analysis has shown that economic benefits have arisen from the measure, prices have been reduced and employment has been generated. The employment conclusion was based on an aggregate “accommodation and food and beverage services” sector. On that basis it is probable that removal of the measure would result in price increases and reduced employment. The Department of Finance analysis was constrained by the absence of appropriate detailed data.

Based on reasonable assumptions about price pass-through, price elasticity of demand for restaurants and demand/employment relationships, this analysis concludes that the restaurant sector may have generated between 700 and 1100 jobs due to the VAT reduction. Alongside the extension of the measure for 2014 and 2015 there should be a detailed evaluation methodology established involving, inter alia, a sample of restaurants, to identify the different impacts on final price and margins.

Overall, the economic and public financial circumstances at end 2013 will be such that it is recommended that the lower VAT rate of 9% should be maintained.

Where the VAT reduction was not passed on in full as a price decrease, it will have improved the commercial sustainability of some existing restaurants which otherwise would have ceased trading. The VAT reduction has therefore contributed to the retention of existing employment and prevented job losses. For every 100 restaurants continuing in business because of the VAT reduction's contribution to operating margin, 800 jobs would be retained.

References

Anderson P. and others. Price Elasticity of Demand. Mackinac Centre for Public Policy. 1997

Copenhagen Economics. Study on Reduced VAT applied to goods and services in the Member States of the European Union. 2007. 6503 DG TAXUD

Foley Anthony. Drinks Market Performance 2012. Drinks Industry Group of Ireland (DIGI) 2013

Foley Anthony. Estimates of Employment in Public Houses. DIGI. 2012

Houthakker H.S. and Lester D Taylor. Consumer Demand in the United States. Harvard University Press 1970

Ministry of Finance. Economic Policy Division. Malta. The Impact of a Reduced Rate of VAT on Restaurants. 2009.

O'Connor Brendan. Measuring the Impact of the Jobs Initiative: Was the VAT reduction passed on and were jobs created? Administration, vol. 60, no.4 (2013) pp.161-179