

Comments on CEBR's report on the western extension of the congestion charge

by Alon Carmel, Economist

This current issues note responds to a report by the Centre for Economic and Business Research (CEBR) for the West London Residents' Association (WLRA) and the Federation for Small Businesses (FSB). Their report, *Will tackling congestion empty west London's tills?*, criticises the research by Transport for London (TfL) and GLA Economics on the economic and business impacts of the congestion charge. CEBR also provide some modelled results of what they consider would be the impacts of the western extension.

This note responds to the criticisms levelled in the CEBR report and shows that they are unfounded. The CEBR report criticises methodologies and datasets used by TfL and GLA Economics but does propose any alternatives. The CEBR report fails to produce a single piece of new evidence to support their claim that the congestion charge has had a far larger negative impact on businesses than suggested by TfL and GLA Economics' research.

CEBR criticise all of the eight main research reports which formed the foundations of the *Third Annual Monitoring Report* and disagree with GLA Economics and TfL that these reports constitute an 'extensive research programme'. Two recurrent criticisms are:

1. The wrong variables (employment and numbers of businesses) were examined instead of turnover or profits.
2. Inadequate control areas were used – i.e. the rest of inner London is too different to the charging zone.

However, this note explains that the variables examined were appropriate and the most direct measures of relevant parameters available. CEBR are unable to show any examples of superior data which has not been used in the research programme. The control areas likewise were the most appropriate which were feasible. No suggestions are made by CEBR of control areas which would have been more appropriate.

The CEBR report also criticises the research into the impacts on the retail sector, and in particular GLA Economics' *Working Paper 12: The congestion charge's impact on retail – The London experience* which was jointly authored with Professor Bell and Mohammed Quddus from Imperial College London. This note explains that the detailed criticisms in the CEBR report are based on a misunderstanding of the data used and/or a misunderstanding of the nature of econometric research.

The estimates presented in the CEBR report of the impacts on turnover, profits and jobs from the western extension are very high and not credible. They are arrived at by a dubious and opaque methodology and do not survive a commonsense check. CEBR state that the western extension would cost the local area around 6,000 jobs. However, considering that the whole borough of Kensington and Chelsea only lost around 8,000 jobs over the five years of London's most severe recession in the last two decades (1989-1993), this estimate appears exaggerated.

It must be concluded therefore, that the CEBR report offers very little useful analysis or evidence to inform the policies of TfL or the Greater London Authority (GLA) with regards to the western extension.

1. General comments

The West London Residents' Association (WLRA) and Federation of Small Businesses (FSB) commissioned CEBR (the Centre for Economic and Business Research) to write a report on the impact of the proposed extension of the congestion charge to west London. The report, *Will tackling congestion empty west London's tills?*¹ was launched in a press conference on 4 July 2005 and received coverage in the *Evening Standard* and *Financial Times*. This note provides some initial comments on the report and its criticisms of the Transport for London (TfL) and Greater London Authority (GLA) research programme on economic and business impacts of the congestion charge.

Despite heavily criticising the research done by TfL and GLA Economics, CEBR advances no new evidence to contradict this research. Indeed the only piece of robust evidence which supports CEBR's claim that congestion charging might have a significant negative impact is research published by GLA Economics and relates to one individual company in one particular sector (retail). Moreover, this research – *Working Paper 12: The congestion charge's impact on retail: the London experience*² – clearly demonstrates that the result for this particular store cannot be generalised to the rest of the central London retail sector.

Without providing any further evidence, the CEBR report dubiously re-interprets qualitative assessments of potential impacts of the western extension as quantitative impacts and inputs them into the CEBR model. This gives large numbers for the western extension's impact that are difficult to believe. It is not clear from the report what variables have been adjusted in the model to arrive at these figures.

¹ CEBR, 2005, *Will tackling congestion empty west London's tills?* An appraisal of the economic impact of the western extension to London's congestion charging scheme area, London

² GLA Economics, 2005, *Working Paper 12: The congestion charge's impact on retail – The London experience*, London. Authored by Mohammed Quddus and Michael Bell (both of Imperial College London) and Alon Carmel (GLA Economics).

CEBR's calculations on the potential impact on businesses of the western extension are broadly:

- £236 million of lost turnover to businesses in the Western Extension Zone (WEZ).
- Particularly hard hit sectors are retail (£100 million) and hotels & restaurants (£100 million).
- 6,000 jobs could be threatened by the extension.

TfL and GLA Economics welcome feedback, constructive disagreement and alternate economic analysis from other organisations. In this instance however, the analysis carried out in the CEBR report has some key shortcomings and does not contribute any new, robust analysis. Therefore we feel it does not contribute usefully to the policy debate.

GLA Economics maintains that policy should be based on as broad and robust a range of evidence as possible. Policy decisions should not be made on the basis of one solitary piece of limited evidence and a set of modelled results based almost entirely on assumptions. This is why the research programme on economic and business impacts of the congestion charge covers all sectors of the economy and eight research projects based on four independent data sources. It is clear that these data sources (like all data) have flaws. Nonetheless, the best available data was used. GLA Economics is aware of and has noted the imperfections in the data³ and do not rely too heavily on any one data source or research report. However, the results from all the different research streams support the view that the central London congestion charge had a broadly neutral impact on business in the zone.

³ e.g. see: TfL, 2005, Central London Congestion Charging: Impacts monitoring – Third Annual Report April 2005, London, p. 68; and GLA Economics, 2005, Working Paper 12: The congestion charge's impact on retail – The London experience, London, p. 6.

2. Detailed comments

Section 3 (The Mayor's evidence) of CEBR's report criticises TfL's *Third Annual Monitoring Report*⁴ and GLA Economics' *Working Paper 12*. Section 5 of the CEBR report contains CEBR's indicative impact calculation. This part of this note responds firstly to the criticisms in Section 3 and discusses the calculations in Section 5.

Section 3 of the CEBR report - CEBR's assessment of TfL and GLA Economics' evidence

The Third Annual Monitoring Report

CEBR criticise all of the eight main research reports which fed into TfL's *Third Annual Monitoring Report*. They argue that the eight reports do not constitute an 'extensive research programme'. Two recurrent criticisms are as follows:

- i) The wrong variables (employment and numbers of businesses) were examined instead of turnover or profits.
- ii) Inadequate control areas were used – i.e. the rest of inner London is too different to the charging zone.

The variables examined were the ones for which adequate data was available and which were relevant to the research question. In order to test the impact of the congestion charge on business performance, the approach of the TfL/GLA research programme has been to compare business performance inside the zone with performance outside the zone (over time). Since the charging zone covers a relatively small area crossing several borough boundaries it is necessary to get data at the level of postcodes or wards. It is not generally possible to get hold of reliable data on turnover and profits at this geographical level of detail, otherwise this would have been included. However, CEBR ignore the fact that financial data (on turnover and profits) are not readily available at the geographic level required for an analysis of the impact of the charge (this is clearly explained in the 3AR). To the extent it was possible – e.g. through the Dun & Bradstreet database – such information was analysed (see *Third Annual Monitoring Report*, p. 78). CEBR do not suggest any further data sources, where such information would have been available, that TfL/GLA should have consulted.

Similarly on the issue of control areas, CEBR correctly point out that central London is distinct from most other parts of London or the UK and so it is difficult to identify appropriate control areas. However, they do not suggest any alternative control area which might have been more appropriate than the ones used in the TfL/GLA studies. While it may not be possible to find any ideal control areas, great care was taken in the research by TfL/GLA to use the best feasible control areas. For much of the research on the Annual Business Inquiry dataset, which was used in the *Third Annual Monitoring Report* (p. 73), the control area was the rest of inner London. This may not be ideal, but it is likely to be a part of the UK that is more like central London than anywhere else. Where it was feasible due to data constraints the studies also used other control areas

⁴ TfL, 2005, Central London Congestion Charging: Impacts monitoring – Third Annual Report April 2005, London

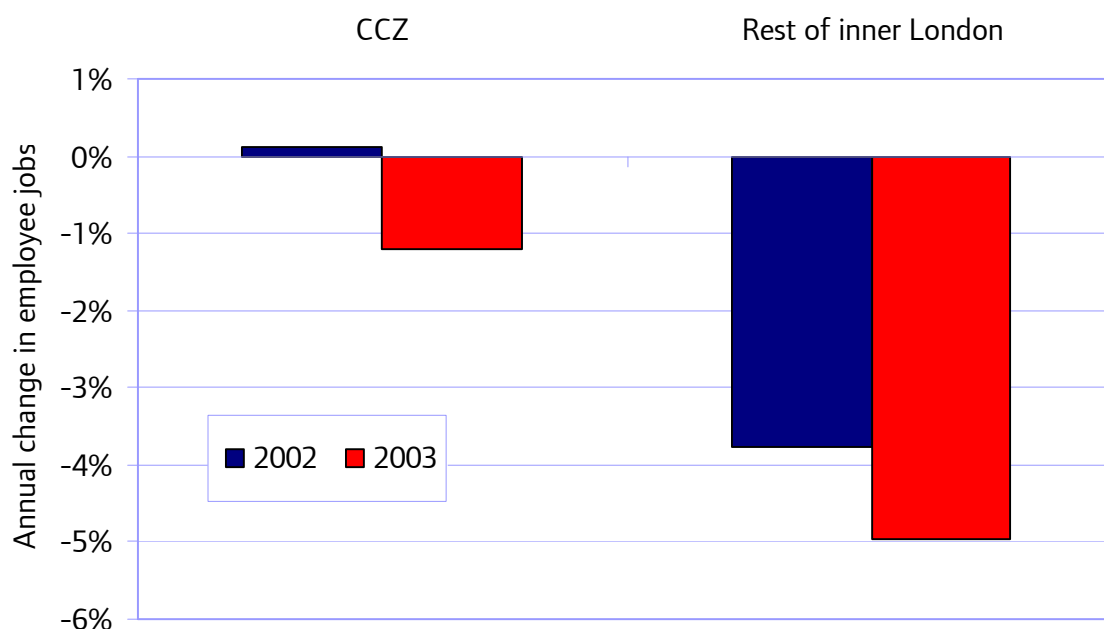
for comparing specific sectors. Thus for comparing the performance of the financial and business services sector, the studies used the Docklands as a control area because this is likely to be the part of the UK that most resembles the City of London in term of financial and business services. Likewise, when examining the retail sector inside the congestion charging zone, Knightsbridge and Kensington High Street were used as control areas (these retail centres being the most similar to the retail sector in the West End).

On one point, the CEBR report questions the interpretation of the data from the ABI. The CEBR report claims that 'closer scrutiny of the ABI employment data contradicts TfL's conclusion' (p 13). CEBR suggest that after stripping out certain sectors which 'one would not have expected to have been impacted', the data shows that as a result of the congestion charge, the remaining sectors within the charging zone lost 6,000 jobs between 2002 and 2003 compared to a small gain in the rest of central London. It is not clear how CEBR have arrived at these numbers, as there is not much detail about what they have included in public services and it has not been possible to exactly reproduce their results. However, leaving this aside there are two serious flaws with CEBR's methodology. First, it is somewhat arbitrary to exclude certain sectors from the analysis on the basis of a guess that these are sectors 'which one would not expect to have been impacted'. Which sectors have or have not been impacted should surely be decided on the basis of evidence.

Second, and more damagingly for CEBR's argument, they appear to have completely missed the point of using control areas. The fact that employment declined in the charging zone between 2003 and 2002 and not between 2002 and 2001 could be the result of the economic cycle or a range of different factors. This is why control areas were used to try and isolate factors that are common to all of London or the UK (like the economic cycle) from factors that are specific to the charging zone (the congestion charge). If you exclude public services (here defined as public administration, health & education), construction, and financial & business services (effectively excluding around 67 per cent of jobs in the zone) from the calculation we do indeed find that the performance of the charging zone deteriorates from a small increase in 2002/1 to a moderate decrease in 2003/2. However, you also get a similar deterioration in the control area (the rest of central London). This is shown in Figure 2.1 and suggests that this deterioration, since it is common to the charging zone and the rest of inner London, is not connected with the congestion charge.

Figure 2.1: Employee jobs in selected sectors - annual change in the congestion charging zone (CCZ) and control area (rest of inner London)

Excluding public services (public administration, health & education), financial & business services, and construction



Source: ABI

Summary

The main thrust of the CEBR report's criticism is that the TfL/GLA studies look at the wrong variables and the wrong control areas over too short a time period. Perfect data and perfect control areas do not exist. Great care was taken to use as wide a range of adequate data sources as possible to build up as complete a picture as possible, and to use the most appropriate control areas. The CEBR report does not suggest any data sources that would provide the required data that we did not use, nor does it suggest any control areas that would have been more appropriate than the ones used. CEBR also question the interpretation we make of the ABI employment data. However, their alternative of excluding a somewhat arbitrary selection of sectors on the basis of a hunch that these sectors would not be affected (they provide no evidence) does not seem robust, and when the control area performance is also examined no effect associated with the congestion charge can be found.

Working Paper 12

GLA Economics published a joint report with academics from Imperial College London in May 2005 (*Working Paper 12 – The congestion charge's impact on retail: the London experience*). This paper applied econometric techniques to the best available retail sales data relating to London and tested whether any impact could be detected from the congestion charge. Two main datasets were tested: (i) John Lewis retail sales data and (ii) the London Retail Consortium's central London retail sales monitor (LRSM). A

number of different models were specified on these series to test the hypothesis that the congestion charge has had a significant impact on the London retail sector. The results suggest that there may have been a negative impact on John Lewis Oxford Street, but not on central London retail sales more broadly. *Working Paper 12* synthesises the results of the only researchers that have used detailed econometric techniques to interrogate actual sales data and represents the agreed joint position of economists at GLA Economics and Professor Bell's team from Imperial College.

The CEBR report acknowledges that the econometric work is technically competent but takes the view that the results pertaining to the John Lewis Oxford Street series (a significant negative impact from congestion charging) is relatively robust while the results pertaining to the broader central London retail sales index (LRSM) – which show no significant impact from congestion charging – are not. This verdict is somewhat puzzling as the models tested are very similar and seems to rest on a number of misunderstandings of the data used and the nature of econometric analysis.

CEBR raise six main objections against the model of central London retail sales:

i) The robustness and quality of the underlying data is untested

The main argument again seems to be that the results are useless because there are problems with the existing data. They point out that the central LRSM is a new time series and so its accuracy is not well understood.

These objections seem based on a misunderstanding of the data used which could have been cleared up had the London Retail Consortium been consulted or even the consortium's website been visited⁵. The LRSM series is not a 'survey' as CEBR claim, but is based on actual sales reported by retailers within the central London area. The data is therefore just as accurate as the John Lewis sales data. The advantages of using the LRSM over John Lewis sales data are that it is far more representative of the retail sector in central London, and since it contains data from several big retailers the effects of brand and store competition should to a large extent cancel out.

The London Retail Consortium and KPMG who compile the LRSM have made every effort to ensure that the retailers who supply their sales data should be as representative of the central London retail sector as possible. Of course the LRSM is based on a sample of retailers rather than including data from every single retailer in central London (which would be prohibitively expensive). However, it is far better to analyse data based on a broad sample rather than confine our attention to data from a sample of one source as in the case of the John Lewis Oxford Street store.

It should also be remembered that no other data on London retail sales exists – for central London or for greater London. CEBR do not suggest any alternative data which is better. Hence, if the judgement is that the LRSM is not robust enough to draw any

⁵ The London Retail Consortium, Press Release, 18 December 2003, New Retail Monitor for London Reveals Real Retail Story for London; www.brc.org.uk/lrc

conclusions, then the implication is that nothing much can be said about the impact of the congestion charge on the central (or greater) London retail sector.

ii) The time period over which the analysis is conducted is too short

The time series for central London retail sales used in this analysis began in October 2001 and ended in December 2004. It spanned a period of three years and three months. The data used in the John Lewis model began in January 2000 and ended in January 2004, spanning a period of four years.

Though of course it would be nice to have longer time series, none were available. With the LRSM there was one year and five months pre-charging data, for the John Lewis data there was around two years and two months. While it is true that it is difficult to elicit a trend from such short pre-intervention series, there was no alternative. And certainly this does not provide any reason to favour the results of one model over another since when it comes to establishing trends it is the length of the time period that matters not the frequency of the data (weekly or monthly).

iii) Idiosyncratic selection of explanatory factors

The factors that entered into all models were not idiosyncratically chosen, but were the results of a careful and systematic modelling process as explained in *Working Paper 12*. There was a clear theoretical economic framework placing the models specified in the context of a widely accepted economic theory of consumption and it was this framework which suggested the variables tested in the modelling process. Several different variables were tried including income (London GVA), wealth (London house prices, UK net financial assets) and tourism (UK and London overseas visits and spending). Some of these variables are available on a monthly basis while others only on a quarterly basis in which case interpolation was necessary. The variables that were kept in the final model were those which both had a solid theoretical basis and which were statistically significant (or nearly statistically significant) in the regression analysis. London unemployment does not, as CEBR claim 'stand proxy for changes in incomes, wealth, confidence and attitudes of the city's shoppers'. Rather, as explained in *Working Paper 12* (pp 13-14), the UK retail sales index is used to proxy for all factors which may affect retail spending in general – i.e. interest rates, incomes and wealth. London unemployment acts merely to catch any differential performance in London relative to the rest of the UK.

iv) The statistical results are, quite simply, too good to be true

The R-squared is extremely high in this model, but as stressed in virtually all econometrics textbooks, too much emphasis should not be placed on it. It is not the arbiter of whether a model is well-specified or not. More crucial is whether the model has a robust theoretical basis and whether it finds statistically significant relationships between the independent and the dependent variables. The relationship between central London sales and UK retail sales is robust and statistically significant. It is of the theoretically expected sign and size. The coefficient on the congestion charging variable is not statistically significant. These results hold whether or not you include the monthly dummy variables – all that changes is the R-squared. In other words, it is perfectly

possible to reproduce the main results of this model with a far lower, and more acceptable to CEBR, R-squared. Excluding the monthly dummies results in an adjusted R-squared of around 0.47. Just as a high R-squared does not show that a model is good, it does not demonstrate that the model is bad or unreliable either.

v) The model lacks data from the period before the September 2001 terror attacks – the cc's impact on retail sales was cancelled out by the rebound in tourism and consumers' confidence in 2003/4

While it would have been preferable to use a very long time series, these do not exist. Hence to the extent that evidence needs to inform policy, policymakers must make do with the evidence that exists rather than speculate on the basis of assumptions and modelled results which depend on those assumptions.

vi) It is unclear whether all the appropriate technical tests have been conducted to validate the results

All relevant diagnostic tests (including White's test for heteroskedasticity⁶) were performed on the models presented in *Working Paper 12* (as stated on p.14). No indication of heteroskedasticity or any other sign of misspecification were found.

Summary

Though the data available is imperfect, *Working Paper 12* has used the best existing data (in terms of data quality and relevance to the policy question) and subjected it to stringent econometric testing of the hypothesis that the congestion charge had a significant impact on retail sales in central London. This hypothesis was rejected by the data. The objections raised by CEBR to the results of the econometric analysis seem to derive from an unfamiliarity with what hard data is actually available, or from confusion about what the data is actually measuring (in the case of the LRSM) or from a misunderstanding of the econometric techniques used.

Section 5 of the CEBR report – CEBR's own indicative calculations of the business impacts of the western extension

In Section 5 of the report, CEBR produce some estimates of what they think might be the impact of the western extension on the economy of the area. The headline results are:

- £236 million of lost turnover to businesses in WEZ.
- Particularly hard hit sectors are retail (£100 million) and hotels and restaurants (£100 million).
- 6,000 jobs could be threatened by the extension.

⁶ Heteroskedasticity is when the variance in the distribution of the data changes over time or over the sample. In the presence of heteroskedasticity, the statistical assumptions underpinning the classical linear regression model fail to hold. For more information, please see: D Gujarati, 2002, *Basic Econometrics*

The methodology which CEBR use to arrive at these numbers is far from clear. They claim that they simply translated TfL and GLA Economics' qualitative judgements about likely sectoral impacts into quantitative impacts according to the formula:

- 'marginal positive/negative' = +/-5%,
- 'neutral or negligible' = 0% and
- 'negative/positive' = +/- 10%.

However, it is not clear why they decided on these values. The quantitative values could equally well be halved or doubled as they are not based on any evidence.

The first observation to make is that TfL and GLA Economics intentionally opted not to try to quantify any of the potential impacts of the western extension because it was felt that as so little evidence was available, such quantification would be irresponsible. CEBR's report, while criticising the data/evidence used by TfL/GLA Economics as inadequate, seems to have no qualms about quantifying impacts on no evidence whatever.

The table produced by TfL/GLA Economics for the *Economic Impact Assessment*⁷ of the western extension, is shown in this note as Table 2.1 (p. 11). It is made clear in the *Economic Impact Assessment* for the western extension that this table is intended to provide a qualitative, indicative judgement only of the potential sectoral impacts.

CEBR's methodology (briefly outlined on p. 43 of their report) raises as many questions as it answers. It appears that the model used for this work is based on the 2002 UK Input-Output tables⁸, adjusted to the size of the western extension zone on the basis of employee jobs data provided by TfL/GLA Economics. It is not clear that a UK level input-output model can be used to model impacts at a sub-regional, or indeed at a borough, level. Nor is it clear what sort of accuracy can be achieved by apportioning national figures on gross operating surplus, taxes, and spending on transport and communications to the western extension area on the basis of employee jobs share (which is presumably what CEBR have done).

⁷ TfL & GLA Economics, 2005, Congestion Charging: Proposed Western Extension: Public Consultation – Economic and Business Impact Assessment, London. See Figure 7 on p.19.

⁸ Input-Output tables are provided by the Office for National Statistics. See: www.statistics.gov.uk

Table 2.1: TfL/GLA Economics qualitative grid of potential impacts of western extension on different sectors

Business sector	Employee jobs	% area jobs	Supply side impacts		Demand side impacts	
			Costs	Productivity	Income	Substitution
Primary & Utilities	1000	<1%	marginal negative	marginal positive	negligible	negligible
Manufacturing	5,600	3%	marginal negative	negligible	negligible	negligible
Construction	2,000	1%	marginal negative	marginal positive	negligible	negligible
Wholesale	5,000	3%	marginal negative	marginal positive	negligible	marginal negative
Retail	25,000	15%	marginal negative	marginal positive	marginal negative	marginal negative
Hotels & Restaurants	28,000	17%	marginal negative	marginal positive	marginal negative	marginal negative
Transport & Comms	9,000	6%	neutral	marginal positive	neutral	positive
Financial & Business Services	42,000	25%	marginal negative	marginal positive	negligible	negligible
Public Administration	7,000	4%	marginal negative	marginal positive	negligible	negligible
Education & Health	26,000	15%	marginal negative	marginal positive	negligible	negligible
Other services	18,000	11%	marginal negative	marginal positive	marginal negative	marginal negative

Source: TfL consultation on the proposed western extension, *Economic Impact Assessment*

The impact of the western extension then seems to be modelled by applying the quantified assumptions to these variables derived from national input-output tables. However, the way this is done does not appear to be even-handed. It appears that they have adjusted the negative impacts to output/sales and to the cost side, but that any productivity increases identified in Table 2.1 have fed through only by reducing the 'headcount', i.e. to employment without raising output. In other words the model rules out by assumption that the congestion charge could raise output by increasing productivity. This is clearly going to skew the results towards a negative impact. It may explain why in the table on p. 44 of the CEBR report⁹, sectors such as financial & business services, public administration, and education & health experience significant job losses according to the CEBR model even though in Table 2.1 (of this report) the positive and negative impacts are considered to cancel each other out (and even though

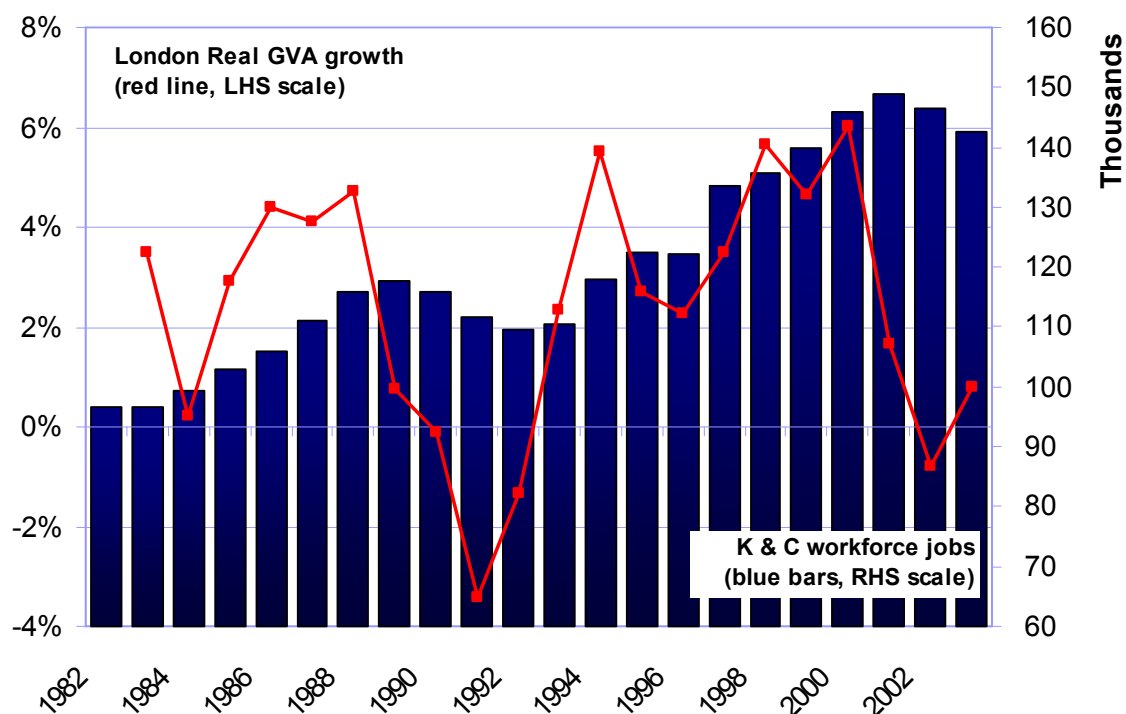
⁹ The table's title is: Impact of CC extension on estimated key business performance measures in proposed western extension area (p 44, CEBR report).

the CEBR report states on p. 13 that these are the sectors ‘which one would not expect to have been impacted’).

The inadequacy of CEBR’s mechanical application of somewhat arbitrary assumptions should be clear from the results that are produced by their model. The first, straight application of these assumptions implies that the western extension would cost the area over 14,000 jobs (including over 2,000 jobs in financial & business services and 50 jobs in primary & utilities) – see table on p. 44 of the CEBR report.

Realising perhaps that this result is unbelievable, CEBR run the model again but exclude productivity gains (p. 47) with the result that the area loses around 6,000 jobs mainly in the retail and the hotels & restaurants sectors. As a reference point, in the very serious recession of 1989-1993, the most severe in London in the last two decades, the borough of Kensington and Chelsea (which is around the same size as the WEZ) lost around 8,000 jobs over five years. This is shown in Figure 2.2 which shows how severe the 1989-1993 recession was in terms of London’s lost output growth, and the change in workforce jobs in Kensington and Chelsea. The implication of the CEBR model is that the impact of the western extension would be of the same order of magnitude as the most severe recession in London or the UK in the last 20 years. This is not a credible result.

Figure 2.2: London real GVA growth and workforce jobs in Kensington and Chelsea (K & C)



Source: Experian Business Strategies

Summary

The results that CEBR produce are based on an opaque and counter-intuitive methodology and a set of unsupported assumptions. The quantified interpretation of a purely qualitative table of impacts from TfL/GLA Economics is misleading and arbitrary – again unsupported by any evidence whatsoever. It is striking that while in the first part of the report CEBR criticise TfL/GLA Economics's evidence base as inadequate, the second part of the report seems content to publish large numbers on the basis of no evidence whatever. The numbers produced by the CEBR model are so high that they fail even a basic commonsense check. They imply that the western extension would have a similar impact in terms of job losses on Kensington and Chelsea as the very severe recession of 1989-1993.

2.3 Conclusion

CEBR's report criticises the evidence base built up by TfL and GLA Economics but it does not point to any contradictory evidence, or any appropriate data source that should have been used, or any serious flaws in the methodology employed. CEBR's criticism of the general evidence base focuses on two points:

- The wrong variables (employment and numbers of businesses) were examined instead of turnover or profits.
- Inadequate control areas were used – e.g. the rest of Inner London is too different to the charging zone.

As explained in TfL's *Third Annual Monitoring Report* and other TfL/GLA Economics reports, the variables examined were all those for which any adequate data was obtainable. The fact that there is not better data, more extensively available at the requisite geographical detail on turnover and profits is regrettable, but not the responsibility of TfL or GLA Economics. It would not be acceptable for public bodies to abdicate responsibility for policy analysis simply because the data available is not perfect. Perfect data does not exist. And in its absence it is the duty of public policymakers to use the best available data to analyse the impact of policies. The criticism of control areas used in TfL and GLA Economics' studies is equally unrealistic. There may be no perfect control area for a region as unique as central London. That does not mean that the methodology of control areas cannot be used. CEBR have been unable to suggest any better control areas that should have been used instead, nor have they suggested any methodology which would be superior to that of control areas to answer the research question.

The objections raised by the CEBR report against the specific econometric analysis of retail data have been shown to be misguided or ill-informed. The imperfections of the data are less significant than CEBR claim, nor is there any better data available on which to carry out this type of analysis. CEBR have not presented any important problems with the econometric approach or results of the models.

The results of CEBR's model setting out what impacts they think the western extension would have on the local economy are implausibly high and based on unsupported

assumptions. There is no evidence advanced to support the claim that the western extension would reduce sales across the whole of the retail sector in the area by five per cent. The only robust evidence of any negative impact from the charge on retail was published by GLA Economics in collaboration with researchers from Imperial College London and pertains to one particular store only. The CEBR model claims that the western extension would cause a loss of 6,000-14,000 jobs. This is implausibly high considering that in the 1989-1993 recession Kensington and Chelsea lost only around 8,000 jobs over five years.

It must be concluded therefore, that the CEBR report offers no useful analysis or evidence to inform the policies of TfL or the GLA with regard to the western extension.

Abbreviations

CC	Congestion Charge
CEBR	Centre for Economic and Business Research
FSB	Federation for Small Businesses
GLA	Greater London Authority
GVA	Gross Value Added
LRS	London retail sales monitor
TfL	Transport for London
UK	United Kingdom
WEZ	Western Extension Zone
WLRA	West London Residents' Association

Reference

CEBR, 2005, Will tackling congestion empty west London's till? An appraisal of the economic impact of the western extension to London's congestion charging scheme area, London

GLA Economics, 2005, Working Paper 12: The congestion charge's impact on retail – The London experience, London. Authored by Mohammed Quddus and Michael Bell (both of Imperial College London) and Alon Carmel (GLA Economics).

D Gujarati, 2002, Basic Econometrics

The London Retail Consortium, Press Release, 18 December 2003, New Retail Monitor for London Reveals Real Retail Story for London; www.brc.org.uk/lrc

TfL, 2005, Central London Congestion Charging: Impacts monitoring – Third Annual Report April 2005, London

TfL & GLA Economics, 2005, Congestion Charging: Proposed Western Extension: Public Consultation – Economic and Business Impact Assessment, London