
Economic PERSPECTIVE

SUSTAINABLE COMPETITION?¹ FERRIES AND COMPETITION ON THE CLYDE

by Professor Neil Kay, Economics Department,
University of Strathclyde

1. INTRODUCTION

The Gourock-Dunoon (G-D) ferry route is presently under review. A consultants report (Deloitte & Touche) on this route was commissioned by the last government and is due to be released soon for public consultation, though its release has been subject to some delay. There are two runs on the G-D route, one operated by CalMac the state-owned operator and one by Western, a private operator. The consultants report is expected to detail a number of options for radical change, most of which apparently involve the closure of one or other of the runs on this route. Since this route is only one of many in the Scottish system, it is worthwhile asking why it merits such attention. There are several reasons.

Firstly, there are numerous ferry routes in Scottish waters with Caledonian-MacBrayne (CalMac) the state-owned operator running 28 different services and more routes operated by other companies. However, the G-D route accounts for about a quarter of all passenger journeys and over a third of all cars carried in Scottish waters by ferries in the

course of a year². A map helps indicate why this route is so busy. The Gourock-Dunoon ferries link the north and south sides of the Clyde in its lower reaches in much the same way that the Forth Bridges link the north and south sides of the lower reaches of the Forth.

Secondly, the G-D route cannot be looked at in isolation. What happens here fundamentally affects CalMac's Wemyss Bay/Rothesay service since the two routes are tightly linked operationally, sharing boats on a daily basis. Any radical changes for CalMac's service on the G-D run would have spillover implications for its sister run. If we add the volume of traffic for the Rothesay route to that for the G-D route, then we are covering over 30% of passengers and over 40% of all cars carried by ferries in domestic Scottish waters in the course of a year.

Thirdly, and unusually, the G-D route is characterised by competition. It is virtually unique in Scottish waters in having two operators competing head to head for overlapping markets. The question has been raised whether or not competition (at least in its present form) is sustainable on this route. If it is not possible on such a busy route, it is difficult to find any other route in Scottish waters where sustainable competition would be possible. If competition is sustainable, then it offers the prospect of offering benchmarks and measures of best practice that might be helpful in setting reference standards in routes where there is no room for more than one operator.

Consequently, the decision on the G-D route is important for economic and strategic reasons, and for reasons of public policy. In this paper we shall analyse the present structure of the route and the nature of competition on it, as well as the source of current problems. We shall recommend a possible course of action that may be, at best, a workable solution to the problems on this route, or, at worst, a simple option that provides a baseline against which to compare other possible solutions.

2. THE PRESENT ROUTE STRUCTURE

The G-D ferry route comprises one service

¹ I am extremely grateful to Mr Ken Duerden (Commercial Director), Andrew Horne (Marketing Manager) and Mike Blair (Area Manager) of Caledonian MacBrayne, and Mr Ken Cadenhead, Managing Director of Western Ferries (Clyde) Limited, for their time and assistance in dealing with some points relevant to this paper. It should be emphasised that the opinions expressed in this paper should be regarded as those of the author alone, and should not be seen as necessarily indicative of the views of any other party.

² Figures derived from Scottish Transport Statistics, and a letter to the Herald (October 8th 1998) by Mr Ken Cadenhead, Managing Director of Western Ferries, detailing Western's market share on this route.

provided by CalMac (the publicly-owned operator) and one by Western Ferries (a privately owned operator). For the purposes of this paper we shall describe these individual services on the G-D route as "runs". The two runs criss-cross each other across the Clyde. CalMac's run terminates near to the respective town centres on either side and is about 70% longer in distance than Western's. Western's terminals are a few minutes drive from the CalMac terminals. The CalMac run connects with other forms of public transport such as trains (Gourock) and buses and so is generally much more attractive for foot passengers. Access to other forms of public transport is more limited for Western. The Western boats are slower than CalMacs and in fact usually take about the same journey time (twenty minutes). Given the closeness of the respective access points and the similar journey times, the physical location of actual run does not make much difference to most drivers, though it would be significant for foot passengers.

CalMac's boats have a carrying capacity for about 40 cars, Western's is more variable though its larger vessels have car capacity close to that of CalMac's vessels. CalMac's boats have capacity for more than 500 passengers, Western typically have capacity for more than 200 passengers. However, it should be noted that passenger capacity is based on the assumption that many car passengers will stay in their cars during the voyage. CalMac's boats are also designed for foot passengers and have comfortable accommodation on two passenger decks. Western's passenger provision consists of wooden slatted benches in a windowless cabin below the car deck on its older ships, and even the improved accommodation on one of its latest acquisitions only has seating for 24 passengers. By way of contrast, the demand for passenger seating on a busy CalMac sailing can exceed this number many times over. The CalMac boats also have catering facilities while the Western boats do not.

Schedules vary marginally by season, but CalMac typically operates an hourly service off-peak on the G-D run, with Western operating a half-hourly service. Under restrictions agreed with the Scottish Office, CalMac is only allowed to advertise one sailing per hour except at peak period (when CalMac operates a half-hourly service). Western offers up to a 3-4 boat service hourly, depending on demand. Western runs into the late evening, CalMac stops earlier in the evening. Because CalMacs boats on the G-D and Rothesay runs are shared, this imposes limits on timetabling. For example, in the winter Rothesay has a one-boat

service at peak period and a two-boat service off-peak, essentially because CalMac only releases its second boat on the G-D run off-peak.

3. PERCEIVED NEED FOR CHANGE ON THE ROUTE

The last government commissioned the present consultant's report because there was a perceived need for change on this route. CalMac's boats were regarded as obsolete and nearing the end of their working life, though they are in fact younger than Western's boats. Any replacement of these boats for the publicly owned operator could entail substantial public funds. In addition, maintenance or improvement of the pier at Dunoon used by CalMac could also require substantial public funds contingent on any decision made about the future operation of the route.

A further element that enters into consideration is that CalMac was apparently making an operating loss of about £800,000 a year on this run, while Western was reportedly making a profit of about an equivalent amount. Further, CalMac appeared to be steadily losing market share over the Nineties on this route to its private competitor (we look at this further below). However, it has been difficult to get precise figures on Western's traffic levels and profitability levels because it is a private operator³.

On the face of it, there would appear to be a *prima facie* case for CalMac withdrawing from the route given the apparent obsolescence of its vessels and the apparently superior performance of the private operator. However, it is not quite as simple as that and we shall deal with the question of obsolescence and performance in turn.

Firstly, as far as obsolescence is concerned, CalMac's regular boats on the G-D run are actually newer than Western's, but they will require re-engined at some point in the future if they are to continue in operation. This is a technical operation with modest financial implications that would enable the working life of the boats to be extended for several years. As far as current performance is concerned, the boats are fast, comfortable and have provision for ancillary facilities such as catering. They provide a good standard of service that could not be replicated by Western's type of boats.

³ CalMacs traffic levels are available as a matter of public record on a route by route basis ([Scottish Transport Statistics](#)), and figures on its profitability of its operations are published on an area basis in its annual report.

Secondly, Western's performance compared to CalMac should not be regarded as simply a reward for greater efficiency. To a large extent it reflects gains from selective privatisation. The prospect of wholesale privatisation of CalMac's public services had in fact been raised and then decided against as impractical in the early days of the last government. However, it did not reject the notion of privatisation of ferry services where possible. At the same time, it did not put into place any regulatory machinery to oversee such privatisation, unlike the case for many other industries, such as railways. This encouraged what became a mix of public and private ownership in the case of the G-D route⁴.

The problems with partially or selectively privatising an industry is that private firms will prefer to select the potentially profitable parts of the network and leave the state to pick up the loss makers. For example, it is not difficult to find firms willing to take on high volume, low cost local intra-city postal services given the opportunity. It is usually more difficult to find takers for low volume, high cost rural services. In the case of the Gourock-Dunoon ferries, Western targeted a potentially high volume route, and the high value low cost car segment within that route. In addition, Western was able to exercise choice over the type of boats it could employ and the frequency of operation.

By way of contrast, CalMac was constrained to provide a public service to much of the Highlands and Islands area and provide a higher cost level of facilities on the Dunoon run, especially for foot passengers. In order to cover the longer run in the time available it also needed faster (and more expensive) boats than Western. As noted above, it was also limited by the government in the frequency of operation it could advertise, a supposed quid pro for receiving subsidy (which Western did not). The restriction also dates from the early Eighties when it was seen as a capacity-balancing measure to prevent CalMac using its (then) greater potential capacity on the route to push Western out of the market. Clearly this is a restriction that is now well out of date, and indeed in recent years it has been serving to distort rather than balance capacity on this route, to the benefit of the private operator.

⁴ Although Western had been involved in the route since the Seventies, the major policy decisions which were to influence the development of the route were taken in the early Eighties.

However, it should be noted that this reflects the current outcome rather than the state of affairs that existed when the current rules of the game were set out in the early-Eighties. In those early days, Western was a small operator barely on the fringes of viability with fewer, smaller capacity boats and a much smaller market than today. The decision to enter this market was a high risk decision and the fact that it has turned out to be profitable should be regarded as at least partly reflecting rewards for entrepreneurial endeavour. Western has subsequently made a great success of a clearly focused cost-oriented strategy. Once it was decided to encourage competition on this market, the restrictions were probably necessary to allow the fledgling company room to grow. The question is whether they are still necessary now that Western is the dominant player on this route. Also, the question of what is an acceptable balance between returns to entrepreneurial endeavour and unacceptable returns due to market dominance is one that recurs in many industrial contexts, not just ferry operations.

A further point that critically influences operator performance on this route is the length of the respective runs. An obvious comparator in terms of performance would be some measure of operating cost per user journey (with some form of weighting to reflect the different categories of user). However, this would be unfair and inaccurate since the CalMac run is about 70% longer than the Western run. Instead, a fairer measure of performance would be a measure of operating cost per user-mile⁵, which would certainly narrow any implied difference in performance on the part of the two operators.

Another way of looking at this issue is to ask how the Western boats would perform if they were required to use the CalMac run (allowing for any necessary changes to pier facilities). If they were to travel at the same speed as on their present run they would take about 34 minutes to cross the Clyde (as opposed to their present 20 minutes). This would lead to unavoidable increases of up to 70% per journey in many operating costs related to travel time (such as fuel and labour costs). Once these are factored into the equation, the longer length of this run means it is unlikely that an operator would be able to transport Western's current customer base

⁵ Cost per user-mile is regarded as a useful performance indicator in other contexts, e.g. in measuring subsidy cost per user-mile in the rail system.

at current tariff levels using Western-style boats and still make an operating profit on this run. Indeed, it is questionable whether any car-service operator could make an operating profit on this run at current tariff levels

In short, the differences in profitability are not surprising and are likely to be influenced by (a) Western's greater frequency of service (b) higher quality service and cost of CalMac's boats (c) Western's shorter run impacting favourably on its operating cost per user journey. These reflect the combination of Western's advantages in being able to pick and focus on the route and market segment it wished to target, and CalMac's disadvantages in terms of restrictions that influenced its frequency of service and cost of service (including operating costs per user-mile). It would be inaccurate to regard the differences in profitability as simply reflecting greater efficiency on the part of the private operator.

None of this implies a criticism of Western since it was simply doing what a responsible commercial operator should do, which is to extract maximum returns for its shareholders. If there is a fault here, it lies with those who designed the rules for competition in this market in the first place. However, the opportunities facing Western and the continuing restrictions facing CalMac gave Western a significant competitive advantage over CalMac. Consequently, it is unfair to compare CalMac's performance on the G-D run with that of its private competitor. Better comparisons would be with its performance on other runs or with other transport operators providing a public service, especially ferry companies.

In this context CalMac's £800,000 operating loss on the G-D run (and implied need for subsidy) does not appear really exceptional. CalMac actually made an operating loss of £5.6 million on its operations overall in 1997 and its G-D run accounted for about 12% of its passenger and car traffic by volume⁶. CalMac's operating loss is almost certainly higher on the G-D run than it would have been in the absence of competition, but the extent to which it is greater should not be exaggerated. Care should also be taken to avoid concluding that all of the operating loss would be avoided if the run was closed down; for example, if the publicised operating loss contains provision for overheads, it may be reasonable to expect that many of these overhead costs would continue to be

⁶ Source: CalMac Annual Report and Accounts for 1997-98. Revenue figures not available

incurred even after closure of the run.

Network operators in transport industries typically make operating losses. In the case of CalMac, its need for subsidy as a percentage of turnover stood at 25% (1996-7) and 23% (1997-8)⁷, despite the loss of the highly profitable Kyle-Kyleakin route on the opening of the Skye Bridge in 1995. This is not out of line with the performance of many other transport operators such as Scotrail (£230 million subsidy at 22p a passenger mile in 1997/98)⁸, and CalMac's counterpart on the west coast of Canada, BC (British Columbia) Ferries: in 1995-96 BC Ferries received a \$31 million subsidy on top of \$341 revenues from users and still recorded a loss of \$39.5 million⁹.

If all transport routes that did not make a profit were to be closed, it would not leave many in operation. CalMac's G-D run does make a loss but the loss is not much more than would be expected from a public service of this kind. The loss is also made in the face of competition against a private firm that has been certain competitive advantages over CalMac. The important questions are: what are the alternatives; and, in particular is competition sustainable (and desirable) on this route? We shall deal briefly with the first of these questions in the next section.

4. PROPOSALS FOR CHANGE

There is not really space to deal with all of the various technical and organisational alternatives to the present arrangement on this route, but we shall briefly outline some relevant considerations. Many of the proposals that have been made involve either a single operator on the route, or a single run on the route (at least for car users). Each of these solutions involves major problems. We raise some of these issues here; it should be borne in mind that they should be compared against keeping the present structure (and boats) with the associated potential benefits of competition. Costs of this latter option would include remedial work on the boats and the pier at Dunoon.

Any operator adopting Western-style boats on the CalMac run would find they are slower and almost

⁷ Ibid

⁸ Source: Office of Passenger Rail Franchising (see www.opraf.gov.uk)

⁹ Source: BC Ferries annual reports and Economic Impact of Major Marine Initiatives - Final Report, March 1997. Prepared for Department of Fisheries and Oceans, Canada

certainly not suitable. As discussed above, they would take much longer to make the journey than on the current Western run and (unless subsidised), tariffs would probably have to reflect the higher operating cost per user-mile. This would considerably reduce the value of the service to users and make it uncompetitive with the existing Western run.

The lack of appropriate sheltered and seating capacity for passengers on Western's run is currently disguised by the fact that it is targeted at car users and carry relatively few foot passengers. If similar boats were to be used on CalMac's current run, it is unlikely that they would be able to provide suitable provision for foot passengers at busy periods.

If either run were to be closed down, it would exacerbate what can already be severe capacity and congestion problems at the appropriate terminals. Even running up to 4 ferries hour, Western is already experiencing capacity problems at times of heavy demand, with CalMac effectively acting to mop up overspill. There are also physical constraints on car parking and queuing to be taken into account. If we extrapolate even a modest expected growth rate in car usage of, say 1-2% a year over the next few years, then with compound growth we would expect any capacity and congestion problems to worsen rather than improve, especially if one of the runs was closed. Indeed it would be strange to consider closing down one of the two ferry runs for such a busy route across the Clyde at the same time that serious consideration is apparently being given to a new bridge over the Forth.

Other solutions include the purchase of new boats. If this is to be done by the public operator it may involve significant amounts of public money. If this is to be considered, then it is important to show that the present situation is unsustainable.

We shall consider this last issue in Section 6. First, however, we shall consider the nature of competition on this route.

5. POSSIBLE SOURCES OF COMPETITION ON THE G-D ROUTE

Ferries can compete with other forms of transport (such as air travel) on price, frequency, vessel capacity, comfort, crossing times, reliability, and on-board facilities¹⁰. All of these are of potential

relevance on the G-D route, and to these elements we can add route characteristics, timetabling and access considerations for this route. The different considerations can influence how the ferries compete with each other as well as with alternatives.

Price: The two operators match each other closely on price and CalMac has even been cheaper in the case of some posted prices. The pricing and selling practices in retail outlets on the Cowal Peninsula are more tightly co-ordinated by CalMac than they are by Western.

Frequency: Western score heavily on frequency with two off-peak ferries per hour compared to CalMac's one. At peak period CalMac have two ferries an hour, Western have three to four per hour

Vessel capacity: Capacity is not normally a problem for CalMac. Western do encounter capacity problems for cars at times. Passenger capacity is not normally a problem. However, it should be noted that while Western's passenger capacity is officially over 200 for most of its ferries, this assumes that most passengers stay in cars for the duration of the voyage. There is minimal seating for foot passengers, as few as 24 places in the case of a recent acquisition.

Comfort: Western's passenger seating is limited and basic. CalMac's facilities are comfortable and spacious on two separate passenger decks

Crossing times: The crossing times are similar for both operators at about twenty minutes. The faster speed of the CalMac boats compensates for the fact that its route is 70% longer.

Reliability: As far as is known, there are no publicly available figures for reliability of services on this route. However, CalMac has impressive fleet-wide reliability figures with over 97% per cent of scheduled services completed on time and a little over 1% of scheduled services cancelled in 1997/98. On the Dunoon route, Western has a marginally more reliable service in certain weather considerations because of technical problems with harbour facilities in rough weather. Reliability is not perceived to be a major issue for either of these operators, despite the fact that a force 8 gale poses more logistical problems than the wrong kind of snow or leaves on the track.

Evaluation of Ferry Subsidies on the Northern and Western Islands of Scotland, Report to Scottish Office, p.v

¹⁰ Cambridge Policy Consultants (1998) An

On-board services: CalMac has on-board catering, Western has none. This is discussed further below.

Timetabling: Western starts their service earlier and runs much later than CalMac, hours of work complications impacting more on the latter's timetabling. This can make Western more attractive for certain users.

Route and run characteristics: Ferry is not the only method of access to the Cowal Peninsula, there is also road access via Rest-and-Be-Thankful. This involves an 80 mile journey Dunoon-Glasgow; ferry is generally more convenient for many travellers. The relative attractiveness of the road option depends on potential users intended route, especially start and finish points. As discussed above, the CalMac run integrates well with other forms of public transport while Western's is less convenient. There is less difference in the physical location of the respective runs as far as most car travellers are concerned given the relative closeness of the respective access points.

Access considerations: by access considerations, we do not mean physical access but how easy it is for travellers to actually use the service. We shall discuss this further below with reference to the special case of ticketing procedures and suggest that this may be an important consideration in this case.

If we were to summarise the major competitive elements in this case, it would seem that price competition is not really an issue on this route. Instead, Western score strongly in terms of frequency, while CalMac should have an advantage in terms of services, such as comfort and catering facilities. In fact, we shall argue that it is not necessarily so clear cut as this and that Western also score better than CalMac in the case of some services if we include access considerations. Further, it will be argued that CalMac has not really fully exploited potential sources of competitive advantage on this route, and we shall consider the reasons why.

6. ACTUAL COMPETITION ON THE G-D ROUTE

Many transport routes where operators compete head to head may be characterised in terms of knife-edge competition, that is it may be difficult to sustain more than one operator in the long run. If one operator drops its price or increases its frequency of operations, this may lead to increased

customers, increased revenues and increased profits. This may enable or encourage the operator to repeat its action, closing the loop and creating a virtuous circle. If the second operator does nothing in these circumstances, it will be eventually driven out of the market. If it responds by matching its rival's actions, then we may be faced with a destructive price war or a process of frequency-matching that simply cannot be sustained in the long run. At some point one firm will be driven out of the market and the other will monopolise the market.

Economists have been aware of these issues for some time and the traditional response was to recommend public ownership, or, more recently, direct regulation. However, in the Eighties it was suggested that the theory of contestable markets¹¹ could provide a solution. The basic argument here was that even in the case of natural monopoly (i.e. room for only one firm because of economies of scale), the winning firm might not be able to enjoy the fruits of their victory if markets were characterised by an absence of entrance and exit barriers.

It was argued that some markets such as transport could be regarded as potentially contestable since it is usually easy to physically redeploy transport equipment such as buses and aircraft between markets. Contestable theory argues that any single operator on a single route trying to exploit its dominance through monopoly pricing would quickly find a competitor entering, under-pricing and pushing out the incumbent, and prices eventually being pushed down to the level where monopoly profits are eliminated.

However, in practice it is difficult to find markets that approximate the contestable ideal, even in transport. For example, if the bus industry was contestable, it is difficult to explain why the owners of the Stagecoach company now rank amongst the richest individuals in Scotland. The ferry industry is even less likely to exhibit contestability since it will require access to physical infrastructure (such as piers) and there may be network level economies (such as in fleet management).

So since Western was able to vary its frequency of operation but CalMac was not (except on the margins), there was every reason to expect that Western would be able to exploit a virtuous circle

¹¹ See Baumol, W. J, Panzer, J, and R. Willig (1982) *Contestable Markets*. New York, Harcourt Brace Jovanovich.

from increasing its frequency of operation and eventually push CalMac out of this market. The surprise is not that this is happening, rather the surprise is that it has not happened more quickly than it has. There are two points worth noting in this context; firstly is Western acting anticompetitively? Secondly, is there anything other than restrictions on frequency that is limiting CalMac's response?

As far as the first question is concerned, there is no evidence that Western is acting anticompetitively. It is certainly not indulging in predatory pricing, since it is able to price low but still make a profit. Indeed, the evidence suggests that it is the public operator that is pricing below cost in this context. There is no evidence that Western is using its greater flexibility in scheduling to push CalMac out of the market (as has happened in the bus market in some cases). Its use of frequency variation as a competitive tool is legitimate in terms of the rules laid down in this contest.

As far as whether and how CalMac could have responded to the competitive threat from Western, we shall deal with this question in the next section.

7. SERVICES AND THE POTENTIAL FOR DIFFERENTIATED COMPETITION

There is one obvious source of competitive advantage open to CalMac versus Western on this route - differentiated competition built around services that it can offer. As noted above its boats are faster, more spacious and more comfortable compared to those of Western and also offer catering services. Yet these advantages have not been sufficient to stem its erosion of market share. One obvious reason is that the major market for which these characteristics may prove attractive (foot passengers) represents a captive market anyway because of CalMac's links to the respective town centres and connections to onward public transport. They may appreciate services such as catering, but the decision to travel by CalMac is unlikely to be affected by the quality of these services.

Instead it is the more flexible (and lucrative) car market that represents the market for which there has been real competition between the two operators. It can also be argued that CalMac has not competed properly to keep or win market share on this market. The problems can be summarised in two main issues (1) the existence of access barriers and (2) failure to take advantage of potential differentiation advantages in commodity

bundling. We shall look at both in turn.

Access barriers - the case of ticketing: As a recent Scottish Office report noted in connection with ferry services, "Households, businesses and tourists make decisions in the light of real or perceived changes in accessibility"¹². This usually is taken to refer to broad-based characteristics associated with the route. However, if there is competition within a route, just marginal real or perceived differences in ease of access and usage of specific runs can create significant differences in the relative attractiveness of respective operators.

This can be seen in the example of ticketing practices on the G-D route. As is common with other ferry operations at home and abroad, both operators offer discounted books for frequent travellers, in this case in books of ten, and for those in the Dunoon area these are widely available for sale at retail outlets in the area. There is no time limit on use of the discounted books sold by Western, nor does the user's car registration have to be specified on the discounted ticket. Individual tickets can also be bought on board ship and tickets can be surrendered without the driver having to leave his or her car; a ticket collector comes round to the cars. Business travellers may be able to use the remaining ticket stub as a claim for travel expenses.

By way of contrast, the CalMac car user has to go to the Purser's Office on board ship to buy a single ticket or exchange the voucher for discounted tickets. This can be inconvenient and may involve a lengthy queue at busy times. The car user has to have his or her car registration printed on the discounted tickets, and faces a time limit of six months over which he or she has to use all the tickets. When the car ticket is surrendered at the end of the voyage, there is no evidence he or she travelled by CalMac unless separate arrangements have been made to get a receipt, which can be a cumbersome procedure.

This may lead to at least four different barriers or disincentive to access for CalMac travellers. Firstly, having to queue at the Purser's Office may discourage elderly or disabled drivers or drivers with young children - or simply drivers who do not like the inconvenience. Secondly, restricting the discount ticket by specifying the car may discourage two-car families who will have to hold separate books of car discount tickets for CalMac when they only have to buy one for Western.

¹² CPC study, op cit, page 8.

Social Trends (1997)¹³ noted that 24% of households in GB now have at least two cars, so it is likely that CalMac's car-specific discounting system will affect a number of potential users. Thirdly, the time limit may influence all but those who are absolutely certain they will use all the CalMac tickets in the time period; occasional drivers who use both Western and CalMac would therefore be inclined to stick to Western. Fourthly, a driver who can more easily use his Western discount tickets for business expense claims will be encouraged to use that service.

There are some other points worth noting about these four types of access barrier;

There is no obvious or necessary overlap between these four different groups of car users potentially switching to Western because of CalMac's ticketing practices. Clearly it may be difficult to say how important each of these groups are, but there is casual evidence that they exist.

These may be issues that influence the decision as to which operator to choose, but they are unlikely to be major considerations in the decision as to whether or not to travel by ferry. Consequently, they are unlikely to appear as serious issues encountered by CalMac in other routes in where it is the single operator

In the context of the G-D route, even if each of these four types of access barriers attributable to CalMac's ticketing practices accounts for a small proportion of Westerns travellers, they can collectively represent a major loss of custom to CalMac. Suppose each of the four different groups of car users discouraged by CalMac's ticketing practices represented just 1% each of Western car custom on the G-D run. Collectively this would represent 4% of Western's car-based traffic. However, given Western's larger market share, this represents about 16% of CalMac's car-based traffic. This would represent a significant proportion of CalMac's business lost to Western simply because of ticketing practices.

Commodity bundling - the case of catering: Commodity bundling is a competitive strategy in which the components of the bundled set would normally be priced higher individually than when the bundle is presented or sold as a package. Thus supermarkets may provide cheap or free parking and cross-subsidised crèche facilities to attract

custom, airlines may compete in providing high quality and/or free services such as in-flight meals and entertainment.

CalMac's service facilities would appear to be an obvious area in which it could compete against Western by offering good quality, reasonably priced, and varied retail services (catering/newspapers etc). This should be an extremely attractive option since Western is in no position to retaliate in this area.

Suppose for example, that the elasticity of demand for CalMacs catering services is about -0.5, so that for every 10% fall in price, volume of sales increases by 5%. Suppose CalMacs on-board catering has revenues of about £1000 a week. If it reduced its prices by 10% it would lose £50 catering revenue a week. But if this attracted just two extra daily car journeys that would otherwise have gone by Western (out of daily Western carryings of over 1000 cars), the indirect gains in extra car and passenger tariffs would more than pay for the direct loss of revenue attributable to the catering price decrease. This is only an indicative example, clearly quality improvements could also help attract car-based custom, especially for those car drivers for whom the ferry journey is only a part of a significantly longer trip. If removing access barriers could be expected to provide a reasonable level of benefits in terms of CalMac's market share, then the same might be expected for enhanced services such as catering.

However, CalMac has recently franchised out its catering services on board its G-D service and effectively lost control of this arm of its marketing strategy. In terms of price and variety of service, the catering on the G-D run now compares badly with services on some other parts of the network. In a sense, this is the wrong way round. Like ticketing practices, catering is unlikely to have a significant effect on the decision to travel on a particular route since it is only part of a number of variables influencing this decision. However, as the airlines believe, it may have an impact on the decision as to which operator to choose on a particular route. It makes more sense to have the highest standards of catering on the routes for which you are facing real competition, not to reduce the standards of these services on such routes as CalMac has done.

So does the existence of access barriers (such as ticketing practices) and the failure to properly differentiate its product (for example through catering services) represent a failure on the part of

¹³ Office of National Statistics (1997) *Social Trends*, London.

CalMac's management? Interestingly, I believe the answer is no, it can be argued that this actually signals rational and sensible decisions on the part of the company. The company is highly professional and well organised at marketing the company and its overall services to the public¹⁴, but there have been special considerations at work in the case of the G-D run.

It is important to see access barriers and catering services in the context of the development of the route. In the first phase, up to 1990, CalMac experienced significant growth on the G-D run as on most of its other routes (126,000 cars in 1987 up to 147,000 cars in 1990). The phrase, if it is not broken, don't try to fix it, would seem appropriate to this period. In the next phase (1990-92) CalMac car traffic slumped to 123,000 in just two years due to a combination of the closure of the US naval base in the Holy Loch, economic pressures, and increasing competition from Western. It is unlikely that marginal improvements to the service would have seemed an appropriate or sufficient response to such a major slump in demand.

The third and final phase, 1992 to the present day, is one that has been categorised by continuing steady erosion of CalMac's market base (2-3% of its car market a year) and heightened uncertainty regarding the future of this route and CalMac's continued participation in it (finally reflected in the consultants report commissioned to look at the route). This has encouraged a short-term perspective to both ticketing practices and catering.

As far as ticketing practices are concerned, there are operational economies to be had from standardising procedures throughout the route. The various access barriers represented by ticketing enables tight control and close monitoring by CalMac. They may inconvenience some passengers, but it is unlikely that they will seriously affect the decision to travel on routes where CalMac is the single operator - which is the standard situation on its other runs.

The implication of our previous discussion is that there is a need for CalMac to differentiate its ticketing practices on this route in order to eliminate all or some of the access barriers. This is unlikely to involve major capital expenditures but new procedures would involve some start-up costs in equipment and retraining. It would also involve the loss of the benefits of standardisation in

practices across all its routes. It may not be worthwhile considering such decisions as long as there is continuing short-term uncertainty concerning the future of CalMac's involvement in this route. As far as catering is concerned, similar considerations apply. It may not be worthwhile investing in building up a reputation for good value catering on this route if there is a real possibility that the route may be removed from CalMac in the near future.

In short, if it could be made worthwhile for CalMac to eliminate the negatives (access barriers) and accentuate the positives (differentiated competition) then this holds out the prospect of recovery of some market share for CalMac, and stable and sustainable competition in this market. This would be unlikely to eliminate the need for subsidy on this run. As noted earlier, subsidy would probably be needed whatever operator was running a car service on this run. However, it would represent improved value for money over the status quo and could represent a reasonable (and probably unavoidable) price for a maintaining a two run service competing on the Gourrock-Dunoon route.

8. CONCLUSIONS AND RECOMMENDATIONS

It was noted at the start that sustainable competition might be regarded as the preferred solution for many markets if it can be achieved. In practice, the problem is to be found in the word "sustainable" and on the face of it, the G-D ferry route does appear to be characterised by features, which make competition intrinsically unstable in this context.

However, it has been argued here that there may be scope for what might be described as differentiated competition on this route, with Western competing on the basis of frequency of operation and CalMac competing on the basis of services. Consideration should also be given to dropping the obsolete restriction on CalMac's frequency of operation. This would at least open up the possibility of correcting some of the distortion in frequency of operation caused by this restriction. We have not discussed the problem of remedial work on the Dunoon pier if the current levels and forms of service is to be maintained, but this is likely to be a problem which will have to be given urgent attention whatever solution is adopted.

The solution that we are suggesting here is that the respective operators should be encouraged to

¹⁴ See, for example, the organisation and presentation of its award winning web site.

continue to operate with the present route structure for a reasonable period of time, say five years. The operators would also be encouraged to compete with the same types of boats as currently employed on the route. It should be emphasised that this should not be regarded as a status quo or do nothing alternative. Rather this would remove the immediate threat to CalMac's run and so give it a reasonable period to consider investing in methods and practices which would both remove access barriers (e.g. by matching Western's ticketing practices) and allow them to differentiate their service from that of Western. The progress and nature of differentiated competition on the route could be monitored by the Scottish Office over this period to see if lessons could be drawn from the experience. There are a number of other advantages to this solution;

It is low risk. It involves very little investment by either company and, at least for the moment, avoids the need for potentially controversial financing proposals such as PFI or PPP. Even if it fails, little harm will have been done and something will have been learned.

It does not pre-empt any other solution, including those detailed in the options set out in the consultants report. These could remain on the table, where and if this is thought appropriate. However, it does give a breathing space and planning period to see if sustainable competition is possible on this route.

If it works, it could avoid the need for a regulatory framework in this route, though it would be desirable for it to be lightly monitored by the Scottish Office to make sure neither operator resort to unfair competitive behaviour.

It gives a unique opportunity to see if sustainable competition is workable in cases such as ferry services.

The solution is in tune with the current emphasis on Best Value in the Scottish Office. The terms of reference for the consultants report were written under the previous government in which the emphasis was more on least cost solutions. To a large extent, that report has been overtaken by events.

To the extent that CalMac improves its services to users by testing them in the market place in competition with Western, it may provide internal benchmarks and measures of Best Value that could be considered for adoption fleet-wide where

appropriate.

It is in the interests of CalMac that it succeeds in maintaining a viable role in the face of private competition. "Viability" here should be judged in terms of how it performs once its disadvantages versus the private operator in terms of frequency of service, quality of service, and costs associated with the longer run are taken into account. If it is deemed to not perform adequately, it may lead to arguments for further privatisation elsewhere in its system. Subsidy in this context should be seen as a price that is contingent on historic and present disadvantages imposed on the public operator compared to the private operator.

Interestingly, it may also be in the long-term interests of Western that CalMac survives on this route. If CalMac withdrew, then Western would have effective sole control of one of the most important strategic arteries on the West Coast. There would then be strong pressure for action to be taken to protect the public interest (e.g. regulatory control over the route). There is no guarantee that Western would be better off as a consequence of such changes.

Finally, the test with which the present set of recommendations should be judged is quite simple; is there a better alternative or set of alternatives? At the very least this present exercise may help set a reasonable baseline against which other proposals can be judged.