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CROSS CHANNEL PASSENGER TRAFFIC 1960-1990

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1. INTRODUCTION

Over the period of thirty years (1960-1990) passenger movements between Britain and the Republic of Ireland have grown from just over 1 million to just over 3.5 million per annum. The average annual rate of increase has been 4.1%.

The purpose of this paper is to examine this annual growth period by period over the thirty years. However, I will not try to present an econometric model of passenger movements and other factors over the period. This has been done by others in relation to some of the data, particularly in relation to tourism - interesting, complex, sophisticated, e.g. by Kevin Barry and John O'Hagan published in the Economic & Social Review (January 1972). I believe that a number of students have visited this topic when writing Masters theses. From the British end some interesting work has been done - for example by Edwards (1976) in Economist Intelligence Unit Report No. 62.

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I admire such work but I believe that there are just so many variables and subvariables - economic, pricing, political, competitive and product - that the data is not amenable to econometric model building that is genuinely useful at least in relation to individual markets as distinct from global forecasts for total foreign travel, say by British residents. Maybe the researcher for an individual market can achieve a reasonable fit for his model over a limited period of time but, extend it back or forward, and the neatness of the fit seems to disappear. I hope I am not being unfair to some research of which I am not aware. My approach is different but if it helps some future econometric exercises, that will be fine.

I have said that the average annual rate of increase has been 4.1%. The growth however has not been smooth. In six years the number of movements fell below those of the previous years but the falls in 1962, 1970 and 1974 were less than 1%. More significant falls occurred in 1972 (-11%), 1976 (-3%) and 1981 (-4.5%). I will attempt to interpret these major departures from the longterm trend in terms of specific circumstances and events.

Several years also showed variations that were well above the trend:- 1964 (+12%), 1968 (+10%), 1973 (+12%), 1977 (+12%) and 1978 (+16%), the biggest increase experienced in any single year over the period. In particular, recent years have shown growth which is well above average - 1987, 1988 and 1989 all showed increases of 13% and while 1990 itself showed a reduced growth of 7%, that too was above the longterm trend.

To speak of percentage increases in total Cross Channel passenger movements might be regarded as simplistic. The total volume of movements is made up of many segments. There are the Irish originating and British originating segments. Indeed, the segment I describe as "British originating" could more accurately be described as "originating abroad" because it includes visitors from the US and Continental Europe who use local transport services to cross the Irish sea. Then within each of these two major segments - ex Ireland and ex Britain - there are tourist, visiting friends and relatives (VFR), and business traffics. There are also the very interesting modal segments, i.e. air and surface, which of course can be sub-segmented into all the previous origin and purpose of travel traffics that I have just mentioned.

One has got to start somewhere and the simple overall growth factor can be used as a useful trigger for looking somewhat more closely at what has been happening to the various sub-segments of traffic.

All the data that I could compile on the traffic and the various sub-segments are attached as appendices and illustrated by graphs which should be consulted when studying this paper. The comparisons, analyses and interpretations that I will now attempt are based on this data.

I have mentioned individual years in which there was a significantly below average or significantly above average growth in movements. Leaving these individual years aside for the moment, some sub-periods emerge where average growth was above or below the longterm overall trend. The selection of these sub-periods of course must be arbitrary to an extent. The ones that I offer for consideration are as follows.

Annual Percentage Change in Passenger Movements, 1960-1990

1960-1969	+ 05.10%
1969-1976	− 00.05%
1976-1979	+ 10.00%
1979-1986	+ 00.90%
1986-1990	+ 11.30%

The paper will now attempt to explore these individual periods. When I have completed the period by period survey I will return to an overview of some major changes in the annual pattern of movements between 1960 and 1990 - for example, Irish originating passengers compared to British originating passengers. There has been a significant difference in their respective growth over the thirty years.

Similarly the performance of the air and surface modes differed greatly through the period. It was not simply a case of total air movements growing faster than or gaining continually at the expense of surface movements. Fluctuations in the respective performance of the modes merit attention in the period by period survey.

I will look particularly at what has been happening in the past few years in terms not merely of growth but of the economics of the transport operators. Finally, I will look at what is happening in the current year and what may be expected for 1992.

2. THE PERIOD 1960-1969

The period of the Sixties was the most stable of the thirty years in terms of growth of passenger movements Cross-Channel. When we look to economic indicators we find that growth in GNP was positive in the UK during this entire period in the sense of the performance of GNP in one year compared to another. Similarly the Irish GNP shows positive year on year variances. It will be recalled that the early sixties were the era of Lemass/Macmillan - a feeling in Ireland that sustained economic improvement was now possible after the disappointments of the Fifties and a situation in Britain that allowed political party boasts that "you've never had it so good".

However, when we look more closely we see that in fact 1962 and 1966 showed no growth in total movements compared to the previous year and are worth looking into further. Interestingly, both years show a dip in the rate of economic growth. In the case of the UK, from which the bulk (73%) of the traffic was originating, GNP grew by 1.5% in 1962, down from 2.6% in the previous year. In the following year the British GNP growth rate recovered to 3.7%.

On the question of the relevance of GNP growth to this exercise, I would just mention that a small increase in the real volume of GNP can represent a significant increase at the consumers' discretionary margin. GNP growth is more easily available than other series and serves as a useful indicator of overall economic activity.

Similarly in the case of Ireland, there was a dip from 4.8% growth in GNP in 1961 to 3% growth in 1962, rising again to 4.6% in 1963. In fact while traffic as a whole showed virtually no change in 1962 compared to 1961, British origin traffic fell by 2%, compensated for by an increase in Irish originating traffic of 3%. Again that 3% growth in Irish originating traffic was lower than the 6% achieved in the previous year and than the 8% achieved in the succeeding year. If the total traffic in 1962 showed a fall of 1%, air continued to gain and grew by 5% while sea fell by 5%.

Another interesting item in 1962 was that net emigration from Ireland declined to 8,000 from levels of 40,000 in 1960 and 15,000 in 1961. The impact of emigration on Cross Channel passenger movements is not a simple one. Heavy emigration tends to generate passenger trips in succeeding years, particularly in most recent years during which the cost of travel has fallen. The fall in emigration which occurred in 1962 reflected I think the slowing down in UK growth in that year. If we were to look at unemployment figures in the UK, we might also find some explanation for a decline of 8% in the category of VFRs visiting Ireland in that year.

The second year that showed off-trend performance in the 1960s was 1966 when there was zero growth. Again the economic indicators show a slowing down in UK growth to a 1.9% increase in GNP lower than the 2.6% achieved in the previous year and the 2.4% achieved in the succeeding year. Similarly in the case of Ireland, GNP growth fell to 1% in 1966 compared to 2.2% in the previous year and 5% in the succeeding year. Again in a curious parallel with 1962, emigration in 1966 was down to 13,000 compared to 21,000 in the previous year and 16,000 in the succeeding year.

However, the contest between air and sea is quite interesting in 1966. Growth in movements by air actually accelerated in 1966 to 15% (compared to 7% in 1965) while movements by sea declined by 12%. In addition to the economic factors and reduced emigration levels, a factor to be mentioned in relation to the carryings of the surface carriers was a British seamen's strike which lasted from 16 May 1966 to 1 July. The six-week seamen's strike affected surface carryings but it must also have had some depressing effect on total movements in that year. Air carriers would not have picked up all the lost surface journeys. 1966 was the year in which Aer Lingus began introduction of jet aircraft to replace the Viscount turbo-props, but the BAC One-Elevens were used on services to the Continent and while they operated through Manchester, the stimulus that this advance in air transport would have had on Cross Channel air passenger movements would not have been significant in the context of the other circumstances of that year.

As a footnote to 1966, the Tourist category of visitors shows a fall of 2%, VFRs a fall of 5% and Business an increase of 16%. Examination of Irish and British origin traffic does not explain this odd result. An increase of 16% in Business traffic in one year is highly unlikely. Clearly there must have been some change in sampling procedures or category definitions in that year.

Before I move to the next period, the separate performance of the two transport modes during the 1960s is worth recording. Surface carriers introduced drive-on/drive-off car ferries for the first time during 1966, 1967 and 1968. The air carriers' share of the total Cross Channel passenger movement had been rising fast from 35% in 1960 to 52% in 1966. It then slipped back to 46% in 1969. Season on season pricing variations may explain some of the surface gain but the major factor was the erosion of the air share of UK originating tourists by the availability of car ferries, particularly in 1968.

This was the first interruption in the growth of air at the expense of sea. We will look at this contest again a number of times as we move through the Seventies and Eighties to the present day.

3. THE PERIOD 1969-1976

During this period 1969-1976 cross channell passenger movements showed an average decline of 0.05% per annum followed by the 1976-1979 period when there was rapid growth averaging 10% per annum.

Over the period 1969-1976 there was one severe drop in 1972. As it happens, 1969 itself had shown a 5% increase in movements on 1968, a year in which the UK GNP growth rate dipped to 1.9% from 3.9% in the previous year. Still there was positive GNP growth year on year right up to 1973 at a level comparable to the GNP performance in the period 1964 to 1968.

Annual Percentage Change in GNP, 1969-1975

	Britain	Ireland
1969	+ 1.9	+ 5.0
1970	+ 2.3	+ 3.0
1971	+ 2.0	+ 4.3
1972	+ 3.5	+ 4.3
1973	+ 7.0	+ 4.2
1974	− 1.5	+ 3.4
1975	− 0.7	+ 0.7

In the case of the Irish economy, GNP grew strongly up to 1974: 1969 5%, and 3% to 4% per annum thereafter. Then in 1975 a serious slowdown in economic activity is revealed by a decline to an 0.7% improvement in the Irish GNP. In the case of the UK the economic downturn was both earlier and more severe with an actual fall of 1.5% in GNP in 1974 and 0.07% in 1975.

These figures of GNP growth (positive in both countries up to 1973) provide no explanation for the very poor growth performance of Cross Channel passenger movements. The explanation of course was in political events. 1969 had seen the first major confrontation between loyalists and nationalists at Burntollet during the famous Peoples' Democracy march from Belfast to Derry. That occurred on January 4. On July 14 of 1969 the first death involved in the Northern Troubles resulted from a melee at Dungiven. On August 14 there were six fatalities with the arrival of the British soldiers to quell rioting in Derry. But still, as I said, 1969 showed a 5% growth in movements over 1968. The impact of such events was to be more obvious in following years. On 28 June 1970 five people were shot in Belfast and on 3 July another four shooting fatalities occurred. That year saw no increase in Cross Channel passenger movements.

1971 was to open with four consecutive nights of rioting in Ballymurphy on January 11, and the first death of a British soldier on February 6. In April of that year the IRA blew up a British naval launch in Cork Harbour. 1971 showed Cross Channel passenger movements growing by only 1%.

Let me divert for a moment to what was happening between the surface and air modes during 1970 and 1971 when total movements were stagnant. Aer Lingus introduced the B737 on the Dublin-London route in 1969, cutting travel times in half. British Airways also moved towards jet aircraft at that time. Despite this change sea and air traffic both grew by 5% and 4% respectively in 1969. However, in 1970 sea traffic fell by 9% and air traffic gained by 9% and this may have been influenced by the introduction of jets. Sea traffic was to fall again by 2% in 1971. However, apart from the longterm movement towards air and the introduction of jets on Dublin-London, the destruction by fire of the Menai Bridge between Anglesea and the Welsh mainland must have had an adverse effect on the surface mode. The Dublin-Holyhead route had to be diverted to Heysham for much of 1970 and 1971.

Returning to issues affecting the total volume of travel, on 30 January 1972 Bloody Sunday occurred in Derry during which thirteen civilians were shot. On February 2 the British Embassy was burnt in Merrion Square. 21 July 1972 was Bloody Friday with twenty-one IRA bombs exploding in Belfast and eleven people being killed. Ten days later six people were killed when three bombs exploded in Claudy, Co. Derry. The most serious fall ever in Cross Channel passenger movements occurred in 1972 with an 11% decline on 1971 levels.

As we now know, people abroad did not easily distinguish between events in one part of Ireland and another. But lest we think that the burning of the British Embassy at the opening of 1972 was an isolated event in the Republic, let's note that on 1 December 1972 two car bombs exploded in Dublin. Seven weeks later, 20 January 1973, another car bomb exploded in Sackville Place Dublin. A Loyalist strike took place on 7 February during which five people were killed. On 8 March 1973 the first fatal bomb explosion occurred in London and on 12 June six people were killed by a car bomb in Coleraine.

In view of this series of bomb explosions in Dublin, London and the events in Northern Ireland itself, one might expect 1973 to be a bad year for Cross Channel traffic. In fact, 1973 saw a 12% increase in Cross Channel passenger movements. While this was exceptionally good, it can hardly be taken to mean that violence was not impacting growth. The 1973 improvement on 1972 merely restored total movements to the 1971 level before the burning of the British Embassy in early 1972.

The events of 1974 must now be mentioned. In February an IRA bomb killed twelve British Army soldiers in Yorkshire. On 17 May four bombs exploded in Dublin and Monaghan killing a total of thirty-one people. On 17 June IRA bombs exploded at Westminster and at the Tower of London. Movements in 1974 were frozen at the 1973 level. The Birmingham bombing which killed 21 people took place in November, too late in the year to affect traffic.

In contrast, the events of early 1975 were less headline making, at least abroad, and the most outstanding Northern outrage, killing a record 11 people in one day, did not occur until October. A 2% growth in total movements was achieved. This improvement took place against the background of a slowing of economic activity which I've already mentioned.

The 2% growth in 1975 was not the low point. That small recovery was wiped out in 1976, a year which began with further explosions in Dublin and in Monaghan and on 21 July the British Ambassador, Christopher Ewart Biggs was killed in Dublin. Total movements fell by 3% in that year.

A few other points deserve comment. In 1972, the year of Bloody Sunday and the burning of the British Embassy, British originating tourists declined by 39%. In 1976, the year of the assassination of the British Ambassador, British tourists declined by 25%. If we go back to the year 1969 in which the troubles began, British tourists numbered 653,000. The first year of decline was 1970 (-14%). They fell to their lowest point - 362,000 - in 1976, a drop of 45% from the high point of 1969. Whatever weaknesses there may be in the categorisation of passenger by purpose of journey, the significance of this fall cannot be argued with. British originating tourists were not to recover to the 1969 level for over twenty years, i.e. 1989.

The relative performance of the Irish and British originating sectors just tells us that British travellers were more affected by the violent events of the early sixties than were Ireland's residents. Covering all categories, including VFR and business which showed some growth, total British originating traffic in 1976 was 12% lower than it had been in 1969. In the case of the Irish originating segment the traffic was a half percent lower in 1976 than it had been in 1969. Looking year on year, Irish traffic behaved almost in sympathy, if that's the word, with the British traffic in the period 1970 to 1976 and in the years such as 1972 and 1976 in which British tourism traffic declined most severely, the Irish originating tourism movement to Britain also had its sharpest falls.

As is clear, I have been assuming that violence related to Northern Ireland exercised a key negative influence on Cross Channel passenger movements during the 1969-1976 period. Another factor however was also operating, i.e. the greatly increased availability and social acceptability of "sun holidays" - heavily promoted and heavily discounted. During the 1970s as a whole passenger traffic from Britain to Mediterranean area sun destinations increased by 106%. The abandonment of traditional Irish resorts like Bray and Bundoran by the British working class holidaymaker during the Seventies would have occurred even if the constantly reported violence had not been taking place. Comparable British resorts also declined during this period but in a steady way, without the sharp falls experienced by Ireland in 1972 and 1976.

When discussing the 1960s I mentioned emigration figures. The emigration situation had changed entirely during the Seventies when there was a net inbound migration from 1971 to 1978, averaging 13,600 per annum with the lowest inbound migration figure occurring in 1977.

Finally, there is one other important relevant event during this period to which I have not yet adverted, i.e. the oil crisis of 1973. There are two observations to make. The oil crisis caused an international recession but Britain did quite well in the short-term. The official British figures show a record 7% growth in GNP in the year 1973. That may be attributed largely to the exceptional growth in earnings from the North Sea oil fields and consumer expenditure grew in sympathy by 5% in that year. I suppose that the expansion of the British economy in 1973 contributed somewhat to the "out of phase" 20% growth in British tourists and 11% growth in total British visitor traffic in 1973 relative to the low point of 1972. I would believe however that most of the 1973 growth must be explained by some recovery to "normal" levels from the disastrous 14% decline experienced in 1972.

The other aspect of the oil price explosion of 1973 which deserves mention is its effect on carriers' traffic shares. Because fuel represents a much higher proportion of their operating costs, rapidly increasing oil prices force airlines to increase air fares more than sea carriers to increase their charges. It is to increased air fares that I attribute a decline in air traffic in 1974 while sea traffic increased. In 1972 the air mode was carrying 53% of the total but by 1975, with the increase in air fares, air traffic had declined to 49% of the total and the sea increased its share back to the 1970 level. The surface mode did not hold the advantage for long and in 1976 the air share recovered to 53% - the level which was first achieved in 1966 before the drive-on/drive-off car ferries were introduced, and achieved again in 1972 before the first oil crisis. In the wake of the oil crisis travel between Britain and all European destinations showed similar characteristics between 1972 and 1975 with a 6% drop in air share.

4. THE PERIOD 1976-1979

After 1976 the situation changed dramatically. The years 1977 and 1978 saw the largest increases to that date in Cross Channel passenger movements - an increase of 12% in 1977 and 16% in 1978.

This is a brief but very interesting period on which to dwell. With regard to the economic background, the Irish economy grew by 5.8% in 1977 which compared to 1.5% in the previous year. In the following year a similarly strong growth in the Irish GNP of 5.7% was recorded.

In the case of the UK, nothing particularly spectacular emerges from its record of economic activity. In 1977 GNP growth was 2.6%, virtually the same as in the previous year, and in 1978 there was a stronger 3.4% increase. Accordingly, 1978 was the third successive year of fairly reasonable growth but not spectacularly different from what happened in 1970 to 1972.

The idea that people had just got tired of violence and that both economies were growing comfortably is hardly acceptable as an explanation for the sudden surge. When we look at the performance of the different modes we find some of the explanation. In 1977 sea traffic grew by 24% (191,000) and air traffic by only 1%. Additional ferry capacity and improved vessel standards, supported by strong marketing and pricing initiatives by the surface carriers, explain the size of the recovery in 1977 and 1978. Indeed, a price war took place between the two main surface carriers, i.e. B&I and British Rail. In the following year, 1978, sea traffic again had a major increase and grew by 21% (201,000) but air traffic was to pick up and grow by 11%.

Over the two years 1977 and 1978 there was a 50% increase in surface carryings and the air share declined from 53% to 45%. The explanation seems to be the increased availability of car ferries and the associated price discounting of the surface product. Indeed, given the 50% increase in surface carryings, it is perhaps remarkable that the air carriers achieved a growth of 12% and not surprising that their loss of market share was substantial.

Looking at whether the traffic surge originated in Britain or Ireland, we discover that both grew equally strongly. Over the two years British originating traffic increased by 27% and Irish originating increased by 29%. As for reasons for travel, British originating tourists showed a 51% increase over the 2-year period - the same percentage increase as was achieved by the surface mode. The mobile British visitor was growing and compensating somewhat for the resort based visitor. Oddly, I think, there was a 42% increase in business traffic while VFRs showed virtually no increase over these two exceptional years for total growth.

These figures for business and VFR growth are surprising, to such an extent that one may be somewhat sceptical about how people interpret questions with regard to purpose of journey. Nonetheless, the fact is that between 1976 and 1978 total passenger movements Cross Channel increased by 29%, a larger increase than occurred over any two-year period before or since.

The increase in the car ferry fleets was obviously important but the massive increases in 1977 and 1978 must also represent a release of demand which was suppressed in 1975 and 1976 by the violence of those years, particularly the Birmingham bombing and the killing of the British Ambassador.

1979 saw an entirely different growth performance. From the all time growth record of 16% in 1978, passenger movements in 1979 were only 2% above the level of the previous year. The air mode increased by 5% compared to zero growth for sea. The two countries contributed equally to the low growth. Traffic ex Britain increased by 2%, exactly the same increase as for the Irish originating traffic.

1979 was also the year of the killing of Lord Mountbatten and the beginning of a trough in movements ex Britain that was to bottom out in 1981. In terms of the economic background, 1979 was the beginning of a slowdown. The UK GNP growth declined from 3.4% to 2.8% in 1979, a growth rate that would not be again achieved until 1983.

Economic activity in Ireland was also slowing down from 5.7% in 1978 to 3% in 1979.

A major factor behind the slowing down in economic activity was the explosion in oil prices that occurred in 1979 and 1980. As in the case of the first oil crisis the effect on the air mode was immediate and severe (see over).

Of course, there were other economic factors at work - anti-inflationary monetarist policies in the UK and the contrasting reluctance in Ireland seriously to address financial problems.

5. THE PERIOD 1980-1985

The relative performance of the UK and Irish economies over this period is worth observation:

Annual Change in GNP, 1979-1985

	Britain	Ireland
1979	+ 2.8	+ 3.0
1980	− 1.7	+ 1.7
1981	− 1.0	+ 2.1
1982	+ 1.5	− 1.7
1983	+ 3.5	− 1.2
1984	+ 2.1	+ 1.6
1985	+ 3.6	+ 0.3

Britain's recession was earlier but relatively brief. Ireland's recession was later and more prolonged.

These figures give an opportunity to examine an assumed relationship between traffic growth and GNP as a measure of economic activity. Did movements ex Britain improve as UK GNP improved? The answer is definitely yes. Did Irish originating traffic do likewise? The answer is more complex.

Movements Variation per annum

	Ex Britain	Ex Ireland	Total
1980	− 1%	+ 4%	+ 1%
1981	− 3%	− 7%	− 4%
1982	+ 3%	+ 2%	+ 3%
1983	+ 4%	− 1%	+ 2%
1984	+ 5%	0	+ 3%

Certainly the Irish traffic ceased to decline again after the economic indicators of annual change in GNP bottomed out in 1983. However, there was a serious drop (-7%) in 1981 which was the biggest single setback in the Irish originating sector over the entire period we are examining. Traffic ex Britain also declined (-3%) in that year.

There was another factor at work - the effect of increasing oil prices on the cost of travel. In 1978 the average price per gallon quoted by OPEC Review was $13.3 per barrel. That rose to $18 per barrel in 1979, $30 per barrel in 1980, $36 in 1981, after which oil prices remained fairly stable until they fell abruptly in 1986.

Increased oil prices required widespread and significant increases in fares charged by commercial airlines. The relative performance of air and sea carriers over the next few years tells an interesting story. The actual levels of air traffic declined steadily between 1980 and 1983 and in each successive year after 1979 the air share declined. It stood at 47% in 1979 and then slid to 44%, 43%, 40%, 38% until in 1985 the air share increased by 1% to 39%, still well below the level achieved in 1979. In addition to the increase in air fares which gave a relative advantage to the sea mode, the years 1982, 1983 and 1984 saw acute price competition between the two surface carriers, Sealink and B&I. I recall that Aer Lingus saw its market share decline, sought consolation in the strong growth in car accompanying traffic on the ferries for which it was unable to compete effectively, and pointed out that in comparison with the air share across the English Channel, the Irish Sea air share was not unreasonable. Despite the surface growth, the contest that was taking place between the two surface carriers, giving them additional price advantage compared to the airlines resulted as can be verified by B&I's reports, in emerging financial difficulties for that carrier.

In 1985 an accord was reached between the two surface carriers as a result of which a substantial increase was introduced in surface fares so that the serious losses that were being experienced by both carriers might be reduced. Predictably some commentators shouted "horror". The stabilisation in surface charges in 1985 may have contributed to the slight increase in the air traffic in that year - the first since 1979. Still the performance of the total traffic was sluggish through the period 1979-1985 as a whole. Indeed, the disturbances of the 1970s followed by two years of good growth and then by slow growth in the early 1980s was such that in 1985 the total volume of movements was still only 6% above the levels achieved fifteen years earlier, i.e. 1970. In striking contrast, total passenger travel between Britain and Mediterranean countries increased by 250% over the same period.

To summarise the period of the early Eighties, initially there was a recession in the UK and then economic improvement took place. In Ireland the recession was later in coming but was more prolonged. Traffic growth was slow from both the British and Irish regions. As a result of rising air fares, the competitive price advantage of the surface carriers was increased. Competition between the surface carriers resulted in further strengthening their price advantage relative to the air mode. Meantime the surface carriers were all the time benefiting from the increased trend towards the mobile tourist. In the general economic circumstances the price competition among the surface carriers does not appear to have boosted traffic but it clearly affected the relative performance of the air mode. On the other hand, the level of air fares not merely contributed to the performance of the surface carriers but it must have operated as a deterrent to the expansion of the total market.

6. THE PERIOD 1986-1990

The period 1986-1990 concludes our survey but it is remarkable in several ways and justifies considerable comment before making some observations about what is happening in the current year.

Over the four-year period annual total movements Cross Channel increased by 54% compared to a total increase of 120% in the previous twenty-six years. The average annual growth rate between 1986 and 1990 was 11.3% compared to an average for the previous twenty-six years of 3.1% and the 4.1% average for the entire thirty-year period. The period ends conveniently with the last year for which we have complete results. However, a survey in ten years time would also identify 1990 as a year in which the fast growth tapered off and a new phase of (at best) slow growth commenced.

The period 1986/1990 was one of intense competition among all carriers, air and surface. Certainly the trigger event was the decision by the Irish Government towards the end of 1985 that Ryanair be permitted to operate on the Dublin-Luton route (for some time previously Ryanair had been operating between Waterford and London). Luton was not identified in inter-Government accords as a London Airport in the sense that Heathrow and Gatwick were so identified. Accordingly, designation of Ryanair to operate services between Dublin and Luton could be accommodated within the existing bilateral arrangements between Britain and Ireland. Before its designation Ryanair had indicated that it would be charging substantially lower fares than those charged by the incumbent carriers - Aer Lingus, British Airways and Dan-Air. The period of rising air fares which had begun with the fuel crisis of 1979 and continued through the highly inflationary period of the early Eighties had already ended. A few very limited fare reductions were introduced by the incumbent carriers in November 1985 and in February 1986 some further changes were introduced. Pressure was mounting on the air carriers to reduce air fares further and substantially in view of the fact that world oil prices were falling steeply. The US dollar price of oil had stayed fairly stable between 1982 and late 1985 when it roller-coasted downward. Simultaneously there was a fall in the value of the dollar, as a result of which the price of oil in Irish punt terms fell by 54% between 1984/85 and 1986/87. As a percentage of airline operating costs Cross Channel fuel fell from 20% to 9.5%. The impact on marginal round trip costs was even more dramatic.

The pricing tactics, the marketing rationale and the market share achieved by the different airline combatants in the ensuing contest is a topic for a fascinating study all of its own. Suffice it to say that the highly structured tariff based on a segmented approach to the market, being charged by the incumbent carriers - with an unrestricted Executive return fare of £200 at one end and the heavily restricted Apex fare of £87 at the other - was seriously undermined by the Ryanair initiative of a £99 return fare offered on a "no restrictions/no frills" basis.

Ryanair commenced Luton services in April 1986 with a limited capacity HS748 operation. The incumbent carriers did not make radical tariff changes or reductions until July of that year. Surface carriers held firm through 1986 with their 1985 tariff levels, but the extent of their loss of traffic was such that they reacted strongly in 1987. As a result, by the Summer of 1987 one can say that the cost of Cross Channel travel had been reduced very significantly. It is not possible in a realistic way to say what the average reduction was. The major carriers (air and surface) still maintained a highly segmented tariff approach. For many people the cost of an air journey across the Irish Sea fell by 50%; for others there was no reduction. The reaction of the sea carriers was such that it reduced the cost of surface travel by 30% for much of its traffic and by still more depending on the number of passengers per car. The intense competition among the air carriers and the impact of their new low fares on the surface mode resulted in the surface carriers abandoning the pricing accord which they had arrived at in 1985.

Reduced prices were accompanied by unprecedented growth in total Cross Channel movements. One may ask if price was the only explanation for this boom over the 1986-1990 period. Let's look once again at growth in GNP as an indicator of economic activity:

Annual Percentage Change in GNP, 1986-1991

	UK	Ireland
1986	3.8	− 0.9
1987	4.6	+ 4.8
1988	4.2	+ 2.4
1989	1.8	+ 4.7
1990	2.4	+ 6.0
1991	0.2	+ 2.7

If we had already established a simple correlation between economic growth and increasing travel, one would expect on the basis of this data that 1987 and 1988 were both years which would have shown somewhat above average growth out of the UK with a tapering off thereafter. The more irregular data for Ireland would still indicate that reasonable growth might have taken place but no more than that.

Were there any significant product changes? Not really. Certainly the major increase in frequency of air services that took place over the period did represent a significant improvement in product but this was triggered by volumes. The product change of increased frequencies of itself would not have generated the increased volumes.

Levels of emigration are something else that we have looked at rather inconclusively, I'm afraid, as a factor affecting travel volumes. Throughout the 1970s there had been net inward migration. The 1980s opened with very low net emigration coinciding with a period of depression in the UK. By 1984 as the UK economy strengthened and the economic conditions in Ireland continued to deteriorate, net emigration rose to 20,000, the highest outward movement since 1964. It then continued to rise so that by 1988 net emigration at 46,000 was higher than in any year since 1958. The combination of this level of emigration with lower air and surface fares clearly exercised a positive influence on the total numbers of Cross Channel movements as recent emigrants found occasional or even frequent visits home to be an affordable option. The whole question of the frequency of travel is one to which I will return later.

Let's look now in more detail at the threshold year of 1986. Stimulated in the main, as I am suggesting, by movements in fares, Cross Channel air passenger movements increased by 13% in 1986 - the fastest growth in any single year since 1966. However, the gain was totally at the expense of the surface mode which lost 8% in the volume of passenger movements after having shown no change in 1985. Despite the change in air fares, total traffic in 1986 did not increase at all after four years of low if steady growth. Perhaps one might say that they were introduced too late to have a major effect on travel plans. Also of interest is the fact that UK originating passengers actually declined by 5% in 1986 after falling by 10% in 1985. In contrast, Irish originating traffic grew by 9% in 1986 having already increased by 7% in 1985.

I have mentioned before that the inbound movements include persons whose travel originated outside the UK, e.g. in the United States or Continental Europe. The exceptional decline of 19% (80,000) in US visitors to Ireland in that year, principally due to the collapse of the dollar, must have been an important factor in the reported fall in passenger movements ex Britain. Perhaps 50% of the fall of 70,000 in British originating visitors in 1986 was due to the US factor.

The following year, 1987, was the first of three years of substantial growth in total movements, averaging 13% per annum. 1987 saw a 31% increase in air traffic and, no doubt because of the reduction in surface tariffs, the decline in sea traffic was reduced to 1% (compared to 8% in 1986). Both UK and Irish originating movements increased by 13%. In absolute numbers, UK originating passengers increased by 177,000 while Irish originating movements increased by 129,000 - slightly higher in both cases than the previous record traffic increases in 1978. The air share once again exceeded 50%, a level which it had held through the early Seventies before falling to 38% in 1984 and 1985.

1988 again saw spectacular growth. Travellers ex Britain grew by 17% but traffic growth out of Ireland slowed down to 8%. Air traffic grew by 29% and sea continued to decline (-3%). As in 1987 the total traffic grew by 13%. There is one important factor I must interject here. The boom in air travel was not merely an Irish Sea phenomenon. Across Europe airlines were recording greatly increased growth rates in 1988 and again in 1989, higher than many of them had experienced for decades. Reduced oil prices aided the reduction of fares which increased competition was forcing on airlines.

The figures for Cross Channel growth in 1989 are remarkably similar to those in 1988 with UK traffic growth more than double the growth of Irish originating traffic, and the growth in total traffic being again at the 13% level. However, the growth in air traffic slowed down to 16%, still one of the three best years for air traffic growth over the entire thirty-year period. Especially interesting is the fact that the surface carriers not merely ceased to lose traffic in 1989 but recorded an 8% growth compared to 1988. The surface carriers had virtually lost the individual "foot passenger" to the air mode but was making up for this by astute promotion and exploitation of the car accompanying traffic. Surface passenger numbers were also being helped by coach travel, especially on the southern (Rosslare-Fishguard) route.

However, after three years of almost explosive growth and of disturbance between the air and surface modes, the figures for 1990 indicate that the boom and the disturbance were running down. Total traffic grew by 6%, only half the rate of the previous year, while the two modes had similar levels of growth: air 7%, sea 6%.

Once again the origins of the passenger movements are of interest in these years. The faster growth of the UK segment which began in 1988 continued through 1989 and 1990. Over the three-year period UK originating movements increased by 52% while movements originating in Ireland increased by 17%. Finally with regard to the air and surface modes, air carriers not merely broke once again through the 50% barrier in 1987, but they passed the 60% mark in 1990.

One must enquire as to why the rate of growth slowed down in 1990 to a level that was only half that achieved in 1989 and 1988. There are at least four points to be noted:

- the economic downturn in the UK was reflected in a reduction in the volume of movements abroad by British residents to all destinations;
- the unsettling effect on the international travel market of the Middle East disturbances which commenced in early August 1990;
- the fact that the 6% increase, achieved in 1990, amounted to 216,000 movements, a very substantial number which would have represented a near record increase before the 1986 "take-off" in Cross Channel movements;
- an increase in travel prices was underway under pressure of increasing oil prices and attempts to reduce the losses being incurred by transport operators.

7. ECONOMICS OF TRANSPORT PROVIDERS

I must dwell for a moment on the economics of the transport operators. The largest operator in terms of Cross Channel passengers carried is Aer Lingus (37% compared to 26% for Sealink). Every year since 1984/85 Aer Lingus has reported sizeable Group profits which tend to deflect attention from the financial outcome of its air transport operations. The results of its air transport operations are as follows:

Aer Lingus Intra-European Air Transport Results £m

	1986/7	1987/8	1988/9	1989/90	1990/1
Operating	- 2.1	+ 3.7	+ 1.7	- 17.9	- 27.2
Net (after interest)	- 1.1	+ 6.1	+ 1.8	- 20.3	- 43.2

The divergence between the operating and the net results in the last two years arises from the cost of servicing investment in new aircraft.

The Aer Lingus intra-European air transport results can be taken as a reasonable enough indicator of the operator's profit or loss trends on Cross Channel routes over recent years. Net results on the Atlantic route which is excluded from these figures actually improved over this period. Data on average air fares charged by Aer Lingus on the London routes which comprise 70% of total Cross Channel movements is also available.

	Current Prices	**Constant Prices (base yr.'85)**
	IR£	IR£
1985/86	78.20	78.20
1986/87	66.46	64.03
1987/88	59.06	55.14
1988/89	57.55	52.61
1989/90	58.36	51.20
1990/91	62.55	53.28

We see from this table that average Aer Lingus fares on the London routes after falling by £11.35 or 26% up to 1988/89 have since increased by £5 or 8.7%. The increase of 8.7% from the low point of 1988 is well behind UK inflation for the same period if somewhat ahead of Irish inflation. However, it is still of interest that over the entire period 1985 to 1990 there was a decline in real terms of 32%. Of course, with the exception of the periods immediately following the two oil crises, air fares internationally have shown a longterm downward trend in real terms but at a fraction of the rate that we have seen recently.

The deterioration we have noted in the Aer Lingus bottom line for air transport is not surprising in view of the decline of 32% in real terms in average revenue per passenger at a time when additional capacity was being acquired and existing capacity was being renewed. Cost reductions which can compensate for such a decline in unit revenue while fleet renewal and expansion is required is beyond the realm of reality.

What about other operators? The only one for which profit figures are readily available is B&I. Its problems are well known. B&I's entire shipping fleet operates on the Irish Sea and it is many years since it returned a net profit. As a result of the combination of factors - loss of market share and reduced revenue per unit of business - which took their effect in 1987, a Plan for Viability was launched and major savings were made in operating costs. In addition, between 1985 and 1989 state investment in B&I was increased by £47 million. However, B&I whose passenger business has now declined to 40% of the total has not yet returned a bottom line profit.

B&I's unit revenues and average fares are also worth noting. The 1991 peak charge for a car and four adults is £160 compared to £165 in 1985. In the shoulder period fares of £95 and £115 compare to a flat £115 in 1985. Sustained annual cost reductions exceeding annual inflation levels is the only device that can achieve viability with such revenue trends. For a carrier which started the period 1986-1990 incurring losses, the task would be more than formidable.

Of the other surface carrier Sealink/Stenaline we have never known precisely how they have done though they justified their participation in the 1985 price increases in terms of financial results. Nor do we know their recent results before or after change of ownership except that earlier this year a major cost saving programme was deemed to be necessary.

With regard to airlines other than Aer Lingus, it is clear that none of them have been profitable on Cross Channel routes. Virgin and Capital both operated London-Dublin routes for a brief period in 1988 and 1989 and withdrew. Similarly, Dan-Air ceased operating in 1989 though they had been on the route for thirteen years. British Airways withdrew earlier this year after 22 years. Not merely must these airlines not have been profitable, it is reasonable to conclude that they withdrew because despite the difference in size and cost structures that existed between them, they all perceived the continuing losses which the routes incurred as not being capable of being sustained.

Of Ryanair we know that they have never made a profit. Since incorporation they have incurred losses of over £20 million. In another forum one might speculate as to whether given the fares being charged by the incumbent carriers in 1986, it was either wise or necessary for them to pitch their initial fare as low as £99. A return fare of £120 or £130 might have given them a reasonable margin which would have avoided losses which in view of the relatively small scale of their operation were extraordinarily heavy. It is a view which I happen to know is shared now in retrospect by Ryanair's recently retired Chairman.

Finally we have British Midland who have claimed to be "on target". However, the flavour of the plea they are making to the European Commission concerning "interlining" on the route may suggest that all is not well. Leaving that issue apart, BMA's capacity to operate profitably on their Irish routes must be doubted in the light of the withdrawal of four British airlines because of unsatisfactory results as well as the losses being incurred by the two Irish based airlines and by the Irish ferry operator.

I have dwelt on the returns of the transport operators because I believe that simple observations of levels of growth which were stimulated principally by lowering of travel charges requires consideration as to whether the present historically low level of charges are likely to continue in the light of the losses being experienced by the transport providers. The Statistical Society is not the forum to debate competitive marketing issues, to analyse tactical and strategic decisions of various transport operators, or to speculate as to whether scope remains for sufficient cost reductions to close the gap between the costs and the revenue of transport operators. Still I think it is appropriate to say that the rapid growth which has taken place has been riding a wave of low fares. All waves must run their course. When it hits land it is as likely to crash violently on the rocks of corporate realities as it is to break gently on smooth ground leaving an undisturbed market in its wake.

There are a few further comments I'd like to make before looking at what is happening in 1991. Something which has not emerged from the period by period survey is that for the thirty-year period as a whole traffic originating in Ireland has grown significantly faster than traffic originating abroad (3.87% per annum ex Britain compared to 5.37% ex Ireland).

Indeed, in the 26 years up to 1986 the Irish origin segment grew by a factor of 3.4 while traffic from abroad grew at little over half that rate (1.75). When the faster growth of traffic ex Britain in most recent years is taken into account, the record of the entire period 1960-1990 shows that traffic out of Ireland increased by a factor of 4.5 while traffic originating abroad increased by a factor of 3. In 1960 the ratio of ex Britain traffic to ex Ireland traffic was 2.8 to 1. In 1990 the ratio was much lower at 1.8 to 1.

The next point is that frequency of travel has increased. We did not have any measures of frequency of travel until recent years and comprehensive comparable data is still not available. However, the indications are clear. The NESC Report No. 90 (The Economic and Social Implications of Emigration) noted that "in 1987 there were 22,500 visitors from overseas by people born in Ireland who *had left Ireland within the year.* In 1988 this increased to 64,700 due to an extraordinary rise in the number of this type of visitor from Britain. This very high figure includes multiple visits". Bord Failte data show an increase of 55% between 1988 and 1989 in the number of visitors from Britain who said that they had visited Ireland at least once previously within twelve months (up from 637,000 in 1988 to 991,000 in 1989). Again within one year alone the number who claimed to have made three or more visits to Ireland over the previous twelve months increased by 88%. The still more frequent travellers (six or more trips within a year) grew by 200% - up from 33,000 in 1988 to 92,000 in 1989.

Less startling are some results of an Aer Lingus survey of Irish originating travellers on the London route which indicates that in 1988/89 each traveller made an average of 1.49 visits per year. Business travellers averaged 2.46 visits per year. Data on earlier years is not available.

I find it interesting and surprising that despite the certain increase in frequency of visits, the average stay per visitor does not seem to have fallen significantly. The average length of stay in the years 1984, 1985 and 1986 by British "holidaymakers" was 12.3 nights compared to an average of 11.4 in the three succeeding years. Using the CSO statistics for all Cross Channel arrivals whatever their stated purpose of journey, the average for those who arrive by air was 7.1 nights in the last three years compared to 7.0 in the three previous years. Similarly for arrivals by sea (Cross Channel) in the three most recent years, the average was 10.4 nights per visitor compared to 10.3 in the previous three years.

8. THE YEAR 1991

Finally, a word about 1991. The situation has changed radically once again. Not merely is the period of rapid growth over but the level of movements is down for the first time since 1981. The decline for the nine months to September 30 is 4.3% with both movements ex Britain and ex Ireland falling by the same percentage. There was I believe a more severe fall in the early months (affected by the Iranian conflict) than later on. Looking at the two modes: air traffic is down - by 13% for the nine months. In contrast, sea traffic is up by 8.4% and the air share, which reached 60% in 1989 and 1990, is having its most serious slide ever in one year - perhaps to 55%. Factors discussed in this paper are again at work in this ever changing situation - particularly price and economic recession.

9. CONCLUSION

When I offered to read this paper to the Society I thought that 1990 would prove to be the end of a period of fast growth and therefore that it would provide a good breakpoint for a review. I had not thought then that the 1990 pattern would shatter so quickly. Total movements may not continue to decline through 1992 but it is not easy to be confident about what will happen. Certainly fast growth will not occur. Against a background of economic difficulty, a fast increase in movements over the years 1986/90 was possible only through price discounts that have clearly hurt the transport operators. On the grounds that indefinite haemorrhaging is a terminal condition, these price levels cannot be expected to continue. In these circumstances, the practice by Government of price control which directly affects the Irish air carriers in the interest of the Irish tourist industry and indirectly affects all other operators may prove to be a very narrow focused exercise which in time will self-destruct.

APPENDICES

PASSENGER MOVEMENTS - 1960-1990

Tables

1. Total Cross Channel movements subdivided by origin.
2. Total Cross Channel movements subdivided by mode.
3. Total Cross Channel movements (air and sea) subdivided by purpose of journey.
4. Ireland origin:

   a) sea movements
   b) air movements,

   each mode subdivided by purpose of journey.
5. Total Ireland origin subdivided by purpose of journey.
6. Britain origin:

   a) sea movements
   b) air movements,

   each mode subdivided by purpose of journey.
7. Total Britain origin subdivided by purpose of journey.
8. a) Total sea movements (Ireland and Britain origin)
   b) Total air movements (Ireland and Britain origin)

Graphs

1. Total movements 1960-1990 (linear)
2. Total movements 1960-1990 (log)
3. Total movements 1960-1969
4. Total movements 1969-1979

5. Total movements 1979-1990
6. Total Air and Sea v. Air (1960-1990)
7. Total Tourist Ireland v. Britain (1960-1990)
8. Total VFRs Ireland v. Britain (1960-1990)
9. Total Business Ireland v. Britain (1960-1990)

Note: "Movement" is "visitor" as per CSO statistics. Each such "movement" involves a round trip, i.e. two passenger sectors.

GROWTH RATES

1960–1990

AVERAGE GROWTH RATE PER ANNUM: 4.14%
TOTAL GROWTH : 238%

1960–1969

AVERAGE GROWTH RATE PER ANNUM: 5.11%
TOTAL GROWTH : 57%

1969–1976

AVERAGE GROWTH RATE PER ANNUM: -0.05%
TOTAL GROWTH : 0%

1976–1979

AVERAGE GROWTH RATE PER ANNUM: 10%
TOTAL GROWTH : 19%

1979–1986

AVERAGE GROWTH RATE PER ANNUM: 0.91%
TOTAL GROWTH : 7%

1986–1990

AVERAGE GROWTH RATE PER ANNUM: 11.34%
TOTAL GROWTH : 54%

1960–1986

AVERAGE GROWTH RATE PER ANNUM: 3.08%
TOTAL GROWTH : 120%

1986–1990

AVERAGE GROWTH RATE PER ANNUM: 11.34%
TOTAL GROWTH : 54%

Table I.

TOTAL CROSS CHANNEL PASSENGER MOVEMENTS

YEAR	BRITAIN ORIGIN	% VAR	IRELAND ORIGIN	% VAR	TOTAL	% VAR
1960	784		278		1,062	
1961	843	8%	295	6%	1,138	7%
1962	824	-2%	305	3%	1,129	-1%
1963	832	1%	328	8%	1,160	3%
1964	935	12%	364	11%	1,299	12%
1965	1,010	8%	381	5%	1,391	7%
1966	1,004	-1%	388	2%	1,392	0%
1967	1,053	5%	392	1%	1,445	4%
1968	1,129	7%	462	18%	1,591	10%
1969	1,163	3%	500	8%	1,663	5%
1970	1,103	-5%	553	11%	1,656	0%
1971	1,108	0%	562	2%	1,670	1%
1972	951	-14%	542	-4%	1,493	-11%
1973	1,056	11%	621	15%	1,677	12%
1974	1,055	0%	616	-1%	1,671	0%
1975	1,078	2%	624	1%	1,702	2%
1976	1,028	-5%	629	1%	1,657	-3%
1977	1,147	12%	701	11%	1,848	12%
1978	1,317	15%	826	18%	2,143	16%
1979	1,347	2%	844	2%	2,191	2%
1980	1,337	-1%	875	4%	2,212	1%
1981	1,302	-3%	811	-7%	2,113	-4%
1982	1,341	3%	831	2%	2,172	3%
1983	1,388	4%	820	-1%	2,208	2%
1984	1,463	5%	821	0%	2,284	3%
1985	1,447	-1%	877	7%	2,324	2%
1986	1,378	-5%	956	9%	2,334	0%
1987	1,555	13%	1,085	13%	2,640	13%
1988	1,822	17%	1,170	8%	2,992	13%
1989	2,128	17%	1,244	6%	3,372	13%
1990	2,357	11%	1,267	2%	3,624	7%

Table 2.

TOTAL CROSS CHANNEL PASSENGER MOVEMENTS

YEAR	AIR	% VAR	AIR SHARE	SEA	% VAR	TOTAL	% VAR
1960	369		35%	693		1,062	
1961	434	18%	38%	704	2%	1,138	7%
1962	457	5%	40%	672	-5%	1,129	-1%
1963	508	11%	44%	652	-3%	1,160	3%
1964	589	16%	45%	710	9%	1,299	12%
1965	629	7%	45%	762	7%	1,391	7%
1966	722	15%	52%	670	-12%	1,392	0%
1967	705	-2%	49%	740	10%	1,445	4%
1968	733	4%	46%	858	16%	1,591	10%
1969	761	4%	46%	902	5%	1,663	5%
1970	832	9%	50%	824	-9%	1,656	0%
1971	866	4%	52%	804	-2%	1,670	1%
1972	796	-8%	53%	697	-13%	1,493	-11%
1973	861	8%	51%	816	17%	1,677	12%
1974	828	-4%	50%	843	3%	1,671	0%
1975	842	2%	49%	860	2%	1,702	2%
1976	871	3%	53%	780	-9%	1,651	3%
1977	877	1%	47%	971	24%	1,848	12%
1978	971	11%	45%	1,172	21%	2,143	16%
1979	1,020	5%	47%	1,171	0%	2,191	2%
1980	973	-5%	44%	1,239	6%	2,212	1%
1981	912	-6%	43%	1,201	-3%	2,113	-4%
1982	872	-4%	40%	1,300	8%	2,172	3%
1983	840	-4%	38%	1,368	5%	2,208	2%
1984	869	3%	38%	1,415	3%	2,284	3%
1985	917	6%	39%	1,408	0%	2,325	2%
1986	1,040	13%	45%	1,293	-8%	2,333	0%
1987	1,364	31%	52%	1,276	-1%	2,640	13%
1988	1,759	29%	59%	1,233	-3%	2,992	13%
1989	2,040	16%	60%	1,333	8%	3,373	13%
1990	2,177	7%	61%	1,412	6%	3,589	6%

Table 3.

TOTAL PASSENGERS (PURPOSE OF JOURNEY)

AIR AND SEA COMBINED :

YEAR	TOUR	% VAR	VFRS	% VAR	BUS	% VAR	OTHS	TOTAL	% VAR
1960	387		482		131		62	1,062	
1961	450	16%	518	7%	128	-2%	42	1,138	7%
1962	455	1%	475	-8%	151	18%	48	1,129	-1%
1963	469	3%	480	1%	163	8%	48	1,160	3%
1964	570	22%	513	7%	153	-6%	63	1,299	12%
1965	666	17%	511	0%	151	-1%	63	1,391	7%
1966	656	-2%	487	-5%	175	16%	74	1,392	0%
1967	664	1%	497	2%	202	15%	82	1,445	4%
1968	783	18%	538	8%	200	-1%	70	1,591	10%
1969	805	3%	542	1%	225	13%	91	1,663	5%
1970	706	-12%	590	9%	261	16%	99	1,656	0%
1971	741	5%	597	1%	240	-8%	92	1,670	1%
1972	507	-32%	680	14%	225	-6%	81	1,493	-11%
1973	628	24%	684	1%	269	20%	96	1,672	12%
1974	697	11%	565	-17%	281	4%	128	1,671	0%
1975	763	9%	574	2%	276	-2%	89	1,702	2%
1976	613	-20%	635	11%	281	2%	128	1,657	-3%
1977	702	15%	659	4%	316	12%	171	1,848	12%
1978	878	25%	717	9%	405	28%	143	2,144	16%
1979	836	-5%	737	3%	432	7%	186	2,191	2%
1980	791	-5%	780	6%	448	4%	193	2,212	1%
1981	701	-11%	789	1%	417	-7%	206	2,113	-4%
1982	680	-3%	783	-1%	442	6%	267	2,172	3%
1983	740	9%	805	3%	441	0%	222	2,208	2%
*1984	673	-9%	964	20%	422	-4%	225	2,284	3%
*1985	744	11%	1163	21%	427	1%	220	2,323	2%
*1986	658	-12%	1226	5%	472	11%	0	2,335	1%
*1987	698	6%	1420	16%	502	6%	0	2,629	13%
*1988	762	9%	1594	12%	636	27%	0	2,981	13%
*1989	976	28%	1704	7%	693	9%	0	3,372	13%
*1990	0	-100%	0	-100%	0	-100%	0	3,624	7%

* NOTE : Others are here included in VFRS.

Table 4a.

IRELAND ORIGIN PASSENGERS

SEA

YEAR	TOUR	% VAR	VFRS	% VAR	BUS	% VAR	OTHS	TOTAL	% VAR
1960	32		92		27		13	164	
1961	42	31%	85	-8%	20	-26%	9	156	-5%
1962	39	-7%	85	0%	17	-15%	9	150	-4%
1963	46	18%	85	0%	15	-12%	9	155	4%
1964	51	11%	85	0%	15	0%	16	167	8%
1965	57	12%	87	2%	12	-20%	11	167	0%
1966	43	-25%	77	-11%	13	8%	14	147	-12%
1967	48	12%	80	4%	13	0%	15	156	6%
1968	75	56%	114	43%	20	54%	12	223	43%
1969	66	-12%	120	5%	22	10%	21	229	3%
1970	74	12%	127	6%	29	32%	19	249	9%
1971	91	23%	109	-14%	21	-28%	25	246	-1%
1972	83	-9%	100	-8%	19	-10%	19	221	-10%
1973	134	61%	96	-4%	18	-5%	22	271	23%
1974	143	7%	78	-19%	23	28%	25	269	-1%
1975	182	27%	71	-9%	18	-22%	13	284	6%
1976	153	-16%	66	-7%	21	17%	32	272	-4%
1977	166	8%	101	53%	29	38%	44	343	25%
1978	190	14%	137	36%	39	34%	47	414	21%
1979	188	-1%	132	-4%	33	-15%	48	401	-3%
1980	218	16%	159	20%	31	-6%	53	461	15%
1981	180	-17%	157	-1%	41	32%	60	438	-5%
1982	189	5%	164	4%	41	0%	102	496	13%
1983	221	17%	178	9%	36	-12%	75	510	3%
1984	210	-5%	175	-2%	27	-25%	91	503	-1%
*1985	206	-2%	273	56%	33	22%	-	513	2%
*1986	197	-4%	261	-4%	36	9%	-	494	-4%
*1987	164	-17%	291	11%	34	-6%	-	489	-1%
*1988	144	-12%	227	-22%	38	12%	-	409	-16%
*1989	150	4%	227	0%	35	-8%	-	412	1%
1990	0	-	0	-	0	-	0	408	-1%

*NOTE: Others included in VFRs

Table 4b.

IRELAND ORIGIN PASSENGERS

AIR :

YEAR	TOUR	% VAR	VFRS	% VAR	BUS	% VAR	OTHS	TOTAL	% VAR
1960	40		34		32		8	114	
1961	50	25%	42	24%	39	22%	8	140	23%
1962	44	-12%	50	19%	51	31%	10	155	11%
1963	42	-5%	66	32%	54	6%	11	173	12%
1964	55	31%	74	12%	58	7%	10	198	14%
1965	66	20%	85	15%	51	-12%	12	214	8%
1966	81	23%	85	0%	60	18%	15	241	13%
1967	70	-14%	88	4%	61	2%	17	236	-2%
1968	73	4%	86	-2%	63	3%	19	241	2%
1969	86	18%	90	5%	69	10%	26	271	13%
1970	70	-19%	117	30%	87	26%	30	304	12%
1971	84	20%	134	15%	76	-13%	22	316	4%
1972	78	-7%	142	6%	79	4%	22	321	2%
1973	78	0%	149	5%	93	18%	31	351	9%
1974	94	21%	120	-19%	93	0%	40	347	-1%
1975	97	3%	131	9%	83	-11%	29	340	-2%
1976	98	1%	126	-4%	94	13%	39	357	5%
1977	82	-16%	120	-5%	103	10%	56	361	1%
1978	118	44%	134	12%	131	27%	30	414	15%
1979	116	-2%	135	1%	141	8%	51	443	7%
1980	85	-27%	127	-6%	158	12%	44	414	-7%
1981	85	0%	131	3%	127	-20%	30	373	-10%
1982	66	-22%	118	-10%	120	-6%	31	335	-10%
1983	62	-6%	105	-11%	114	-5%	29	310	-7%
1984	59	-5%	111	6%	124	9%	24	318	3%
*1985	79	34%	142	28%	178	44%	-	400	26%
*1986	97	23%	213	50%	213	20%	-	524	31%
*1987	124	28%	294	38%	294	38%	-	713	36%
*1988	146	18%	390	33%	390	33%	-	927	30%
*1989	158	8%	417	7%	417	7%	-	992	7%
1990	0	-	0	-	0	-	0	859	-13%

*NOTE : Others included in VFRs

Table 5.

TOTAL IRELAND ORIGIN

AIR AND SEA COMBINED :

YEAR	TOUR	% VAR	VFRS	% VAR	BUS	% VAR	OTHS	TOTAL	% VAR
1960	72		126		59		21	278	
1961	92	28%	127	1%	59	0%	17	296	6%
1962	83	-10%	135	6%	68	15%	19	305	3%
1963	88	6%	151	12%	69	1%	20	328	8%
1964	106	20%	159	5%	73	6%	26	365	11%
1965	123	16%	172	8%	63	-14%	23	381	5%
1966	124	1%	162	-6%	73	16%	29	388	2%
1967	118	-5%	168	4%	74	1%	32	392	1%
1968	148	25%	200	19%	83	12%	31	464	18%
1969	152	3%	210	5%	91	10%	47	500	8%
1970	144	-5%	244	16%	116	27%	49	554	11%
1971	175	22%	243	0%	97	-16%	47	562	1%
1972	161	-8%	242	0%	98	1%	41	542	-4%
1973	212	32%	245	1%	111	13%	53	622	15%
1974	237	12%	198	-19%	116	5%	65	616	-1%
1975	279	18%	202	2%	101	-13%	42	624	1%
1976	251	-10%	192	-5%	115	14%	71	629	1%
1977	248	-1%	221	15%	132	15%	100	702	12%
1978	308	24%	271	23%	170	29%	77	828	18%
1979	304	-1%	267	-1%	174	2%	99	844	2%
1980	303	0%	286	7%	189	9%	97	875	4%
1981	265	-13%	288	1%	168	-11%	90	811	-7%
1982	255	-4%	282	-2%	161	-4%	133	831	2%
1983	283	11%	283	0%	150	-7%	104	820	-1%
1984	269	-5%	286	1%	151	1%	115	821	0%
1985	285	6%	291	2%	177	17%	113	866	6%
1986	294	3%	474	63%	188	6%	0	956	10%
1987	288	-2%	585	23%	212	13%	0	1,084	14%
1988	290	1%	617	5%	263	24%	0	1171	8%
1989	308	6%	644	4%	292	11%	0	1244	6%
1990	0	-	0	-	0	-	0	1267	2%

BRITAIN ORIGIN PASSENGERS

SEA :

YEAR	TOUR	% VAR	VFRS	% VAR	BUS	% VAR	OTHS	TOTAL	% VAR
1960	202		268		27		32	529	
1961	223	10%	284	6%	26	-4%	15	548	4%
1962	235	5%	244	-14%	26	0%	17	522	-5%
1963	245	4%	210	-14%	27	4%	15	497	-5%
1964	259	6%	242	15%	19	-30%	23	543	9%
1965	333	29%	218	-10%	19	0%	25	595	10%
1966	295	-11%	186	-15%	20	5%	22	523	-12%
1967	317	7%	199	7%	36	80%	32	585	12%
1968	399	26%	203	2%	19	-47%	16	637	9%
1969	426	7%	202	0%	20	5%	25	673	6%
1970	338	-21%	189	-6%	22	10%	26	575	-15%
1971	349	3%	165	-13%	23	5%	21	558	-3%
1972	212	-39%	228	38%	15	-35%	21	476	-15%
1973	281	33%	222	-3%	25	67%	18	547	15%
1974	328	17%	197	-11%	27	8%	22	574	5%
1975	337	3%	199	1%	25	-7%	15	576	0%
1976	258	-23%	215	8%	24	-4%	17	514	-11%
1977	328	27%	251	17%	31	29%	21	632	23%
1978	431	31%	269	7%	38	23%	21	760	20%
1979	406	-6%	284	6%	38	0%	42	770	1%
1980	383	-6%	298	5%	42	11%	55	778	1%
1981	355	-7%	303	2%	40	-5%	65	763	-2%
1982	348	-2%	327	8%	47	18%	82	804	5%
1983	381	9%	357	9%	44	-6%	76	858	7%
1984	316	-17%	484	36%	29	-34%	83	912	6%
1985	335	6%	533	10%	28	-3%	-	896	-2%
1986	259	-23%	502	-6%	38	36%	-	800	-11%
1987	277	7%	475	-5%	35	-8%	-	787	-2%
1988	284	3%	496	4%	44	26%	-	824	5%
1989	423	49%	455	-8%	43	-2%	-	921	12%
1990	0	-	0	-	0	-	0	1,005	9%

Table 6b.

BRITAIN ORIGIN PASSENGERS

AIR :

YEAR	TOUR	% VAR	VFRS	% VAR	BUS	% VAR	OTHS	TOTAL	% VAR
1960	113		88		45		9	255	
1961	135	19%	107	22%	43	-4%	10	295	16%
1962	137	1%	96	-10%	57	33%	12	302	2%
1963	136	-1%	119	24%	67	18%	13	335	11%
1964	205	51%	112	-6%	61	-9%	14	392	17%
1965	210	2%	121	8%	69	13%	15	415	6%
1966	237	13%	139	15%	82	19%	23	481	16%
1967	229	-3%	130	-6%	92	12%	18	469	-3%
1968	236	3%	135	4%	98	7%	23	492	5%
1969	227	-4%	130	-4%	114	16%	19	490	0%
1970	224	-1%	157	21%	123	8%	24	528	8%
1971	217	-3%	189	20%	120	-2%	24	550	4%
1972	134	-38%	210	11%	112	-7%	19	475	-14%
1973	135	1%	217	3%	133	19%	25	510	7%
1974	132	-2%	170	-22%	138	4%	41	481	-6%
1975	147	11%	173	2%	150	9%	32	502	4%
1976	104	-29%	228	32%	142	-5%	40	514	2%
1977	126	21%	187	-18%	153	8%	50	516	0%
1978	139	10%	177	-5%	197	29%	45	558	8%
1979	125	-9%	186	5%	220	12%	45	577	3%
1980	105	-17%	196	5%	217	-1%	41	559	-3%
1981	81	-23%	198	1%	209	-4%	51	539	-4%
1982	77	-5%	174	-12%	234	12%	52	537	0%
1983	76	-1%	165	-5%	247	6%	42	530	-1%
1984	88	16%	194	18%	242	-2%	27	551	4%
*1985	124	41%	215	11%	211	-13%	-	551	0%
*1986	106	-15%	250	16%	222	5%	-	578	5%
*1987	143	35%	360	44%	265	19%	-	769	33%
*1988	188	31%	481	34%	329	24%	-	999	30%
*1989	245	30%	605	26%	358	9%	-	1209	21%
1990	0	-	0	-	0	-	0	1352	12%

*NOTE : Others included in VFRS

Table 7.

TOTAL BRITAIN ORIGIN

AIR AND SEA COMBINED

YEAR	TOUR	% VAR	VFRS	% VAR	BUS	% VAR	OTHS	TOTAL	% VAR
1960	315		356		72		41	784	
1961	358	14%	391	10%	69	-4%	25	843	8%
1962	372	4%	340	-13%	83	20%	29	824	-2%
1963	381	2%	329	-3%	94	13%	28	832	1%
1964	464	22%	354	8%	80	-15%	37	935	12%
1965	543	17%	339	-4%	88	10%	40	1,010	8%
1966	532	-2%	325	-4%	102	16%	45	1,004	-1%
1967	546	3%	329	1%	128	25%	50	1,053	5%
1968	635	16%	338	3%	117	-9%	39	1,129	7%
1969	653	3%	332	-2%	134	15%	44	1,163	3%
1970	562	-14%	346	4%	145	8%	50	1,103	-5%
1971	566	1%	354	2%	143	-1%	45	1,108	0%
1972	346	-39%	438	24%	127	-11%	40	951	-14%
1973	416	20%	439	0%	158	24%	43	1,056	11%
1974	460	11%	367	-16%	165	4%	63	1,055	0%
1975	484	5%	372	1%	175	6%	47	1,078	2%
1976	362	-25%	443	19%	166	-5%	57	1,028	-5%
1977	454	25%	438	-1%	184	11%	71	1,147	12%
1978	570	26%	446	2%	235	28%	66	1,318	15%
1979	532	-7%	470	5%	258	10%	87	1,347	2%
1980	488	-8%	494	5%	259	0%	96	1,337	-1%
1981	436	-11%	501	1%	249	-4%	116	1,302	-3%
1982	425	-3%	501	0%	281	13%	134	1,341	3%
1983	457	8%	522	4%	291	4%	118	1,388	4%
1984	404	-12%	678	30%	271	-7%	110	1,463	5%
1985	459	14%	652	-4%	239	-12%	97	1,447	-1%
1986	364	-21%	752	15%	260	9%	-	1,376	-5%
1987	410	13%	835	11%	300	15%	-	1,555	13%
1988	472	15%	977	17%	373	24%	-	1,822	17%
1989	668	42%	1,060	8%	401	8%	-	2,128	17%
1990	0	-	0	-	0	-	0	2,357	11%

Table 8a.

TOTAL SEA PASSENGERS

IRELAND AND BRITAIN ORIGIN :

YEAR	TOUR	% VAR	VFRS	% VAR	BUS	% VAR	OTHS	TOTAL	% VAR
1960	234		360		54		45	693	
1961	265	13%	369	3%	46	-15%	24	704	2%
1962	274	3%	329	-11%	43	-7%	26	672	-5%
1963	291	6%	295	-10%	42	-2%	24	652	-3%
1964	310	7%	327	11%	34	-19%	39	710	9%
1965	390	26%	305	-7%	31	-9%	36	762	7%
1966	338	-13%	263	-14%	33	6%	36	670	-12%
1967	365	8%	279	6%	49	48%	47	741	11%
1968	474	30%	317	14%	39	-20%	28	858	16%
1969	492	4%	322	2%	42	8%	46	902	5%
1970	412	-16%	316	-2%	51	21%	45	824	-9%
1971	440	7%	274	-13%	44	-14%	46	804	-2%
1972	295	-33%	328	20%	34	-23%	40	697	-13%
1973	415	41%	318	-3%	43	26%	40	817	17%
1974	471	13%	275	-14%	50	16%	47	843	3%
1975	519	10%	270	-2%	43	-14%	28	860	2%
1976	411	-21%	281	4%	45	5%	49	786	-9%
1977	494	20%	352	25%	60	33%	65	972	24%
1978	621	26%	406	15%	77	28%	68	1173	21%
1979	594	-4%	416	2%	71	-8%	90	1171	0%
1980	601	1%	457	10%	73	3%	108	1239	6%
1981	535	-11%	460	1%	81	11%	125	1201	-3%
1982	537	0%	491	7%	88	9%	184	1300	8%
1983	602	12%	535	9%	80	-9%	151	1368	5%
1984	526	-13%	659	23%	56	-30%	174	[illegible]	3%
1985	541	3%	806	22%	61	9%	0	[illegible]	0%
1986	456	-16%	763	-5%	74	21%	0	1293	-8%
1987	441	-3%	766	0%	69	-7%	0	1276	-1%
1988	428	-3%	723	-6%	82	19%	0	[illegible]	-3%
1989	573	34%	682	-6%	78	-5%	0	1333	8%
1990	0	-100%	0	-100%	0	-100%	0	1412	6%

*NOTE : Others included in VFRs

Table 8b.

TOTAL AIR PASSENGERS

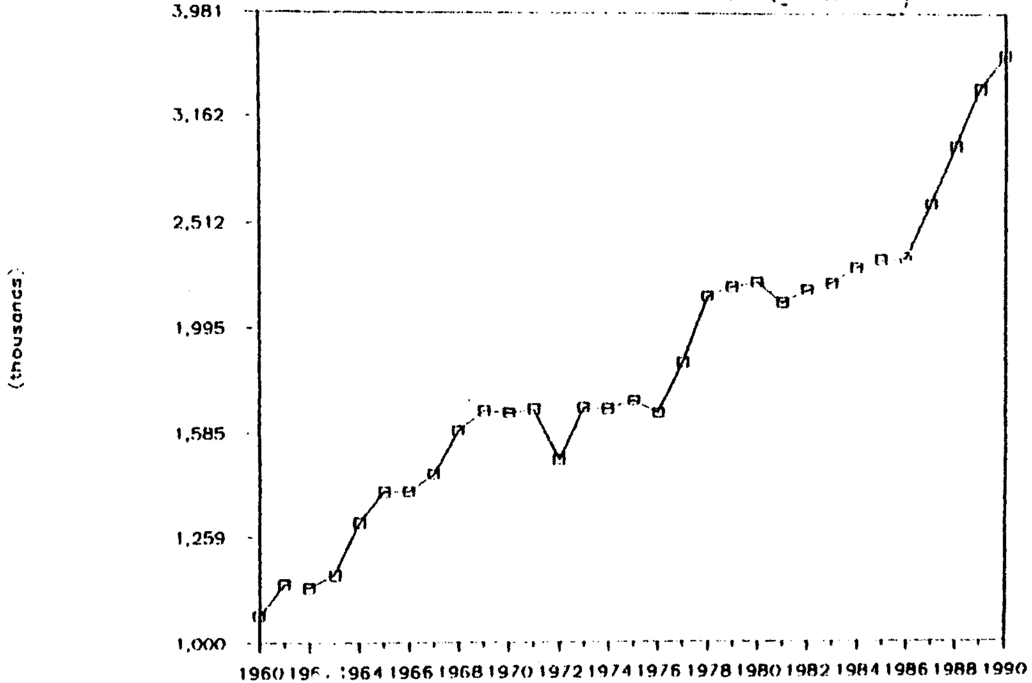
IRELAND AND BRITAIN ORIGIN :

YEAR	TOUR	% VAR	VFRS	% VAR	BUS	% VAR	OTHS	TOTAL	% VAR
1960	153		122		77		17	369	
1961	185	21%	149	22%	82	6%	18	434	18%
1962	181	-2%	146	-2%	108	32%	22	457	5%
1963	178	-2%	185	27%	121	12%	24	508	11%
1964	260	46%	186	1%	119	-2%	24	589	16%
1965	276	6%	206	11%	120	1%	27	629	7%
1966	318	15%	224	9%	142	18%	38	722	15%
1967	299	-6%	218	-3%	153	8%	35	705	-2%
1968	309	3%	221	1%	161	5%	42	733	4%
1969	313	1%	220	0%	183	14%	45	761	4%
1970	294	-6%	274	25%	210	15%	54	832	9%
1971	301	2%	323	18%	196	-7%	46	866	4%
1972	212	-30%	352	9%	191	-3%	41	796	-8%
1973	213	0%	366	4%	226	18%	56	861	8%
1974	226	6%	290	-21%	231	2%	81	828	-4%
1975	244	8%	304	5%	233	1%	61	842	2%
1976	202	-17%	354	16%	236	1%	79	871	3%
1977	208	3%	307	-13%	256	8%	106	877	1%
1978	257	24%	311	1%	328	28%	75	972	11%
1979	242	-6%	321	3%	361	10%	96	1,020	5%
1980	190	-21%	323	1%	375	4%	85	973	-5%
1981	166	-13%	329	2%	336	-10%	81	912	-6%
1982	143	-14%	292	-11%	354	5%	83	872	-4%
1983	138	-3%	270	-8%	361	2%	71	840	-4%
1984	147	7%	305	13%	366	1%	51	869	3%
1985	203	38%	357	17%	355	-3%	0	917	6%
*1986	203	0%	463	30%	374	5%	0	1,040	13%
*1987	267	32%	654	41%	443	18%	0	1,365	31%
*1988	334	25%	871	33%	554	25%	0	1,760	29%
*1989	403	21%	1022	17%	615	11%	0	2,040	16%
1990	0	-100%	0	-100%	0	-100%	0	2,177	7%

*NOTE : Others included in VFRs

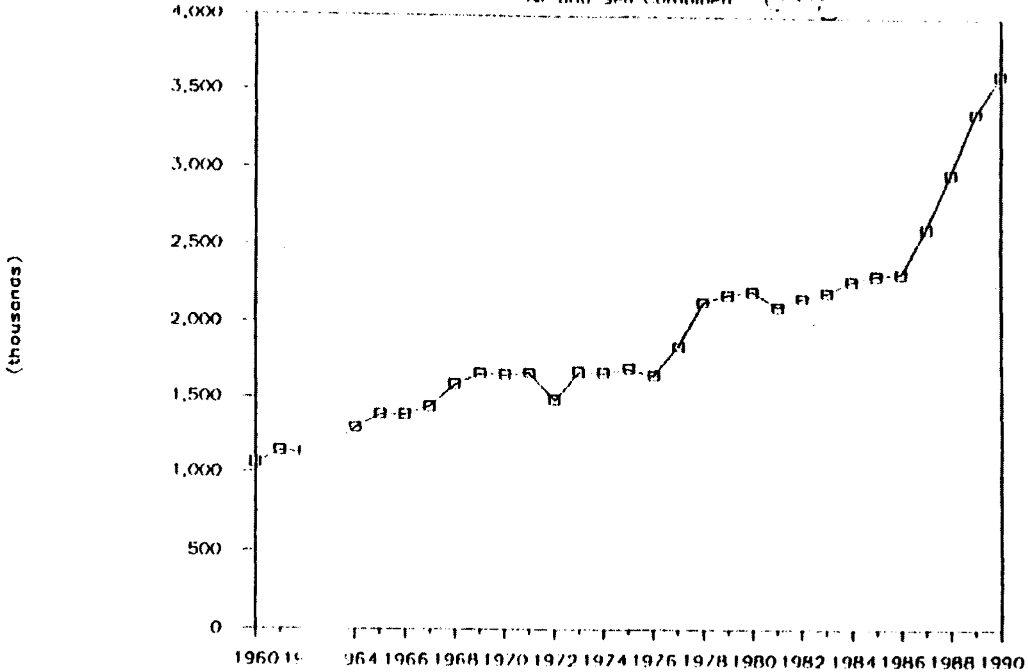
TOTAL CROSS-CHANNEL MOVEMENTS

Air and Sea Combined (Linear)



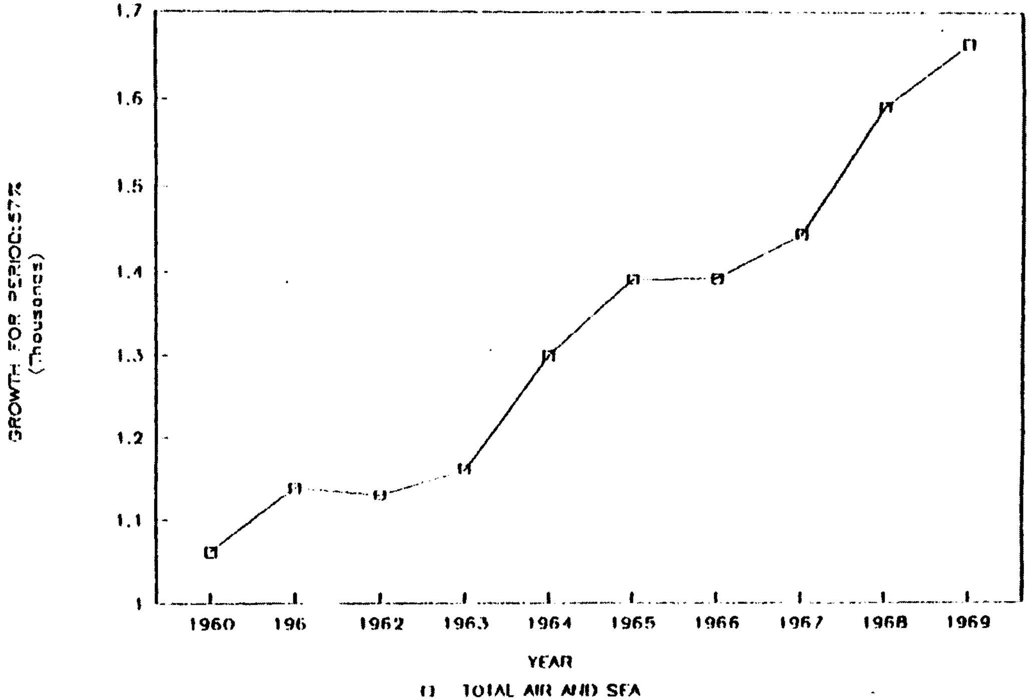
TOTAL CROSS-CHANNEL MOVEMENTS

Air and Sea Combined

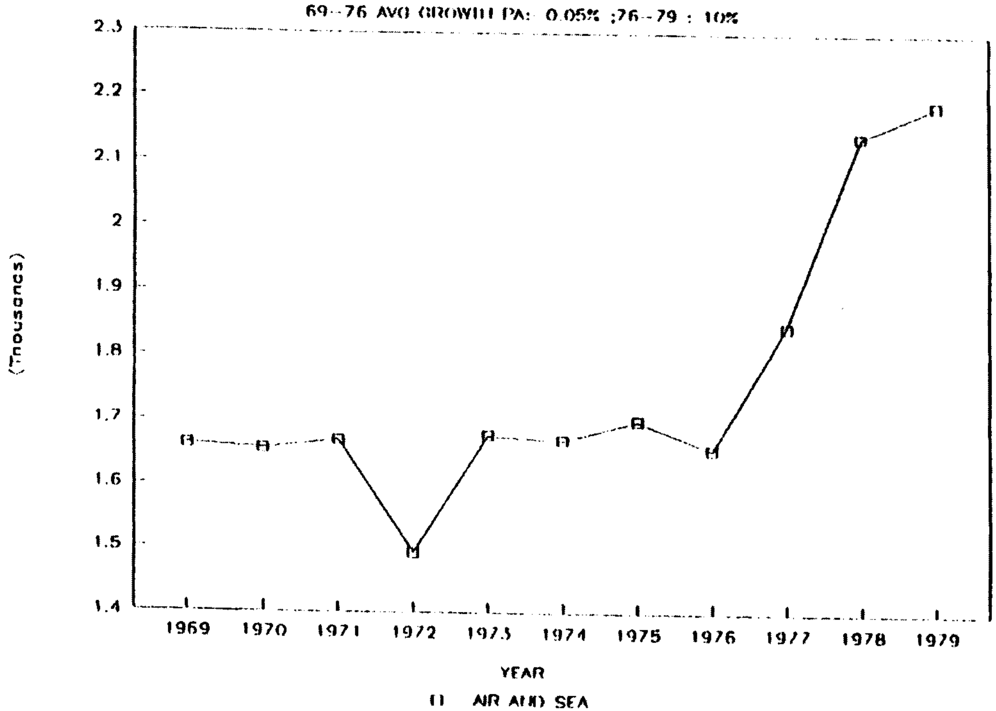


TOTAL MOVEMENTS 1960–1969

AVERAGE GROWTH PA : 5.1%

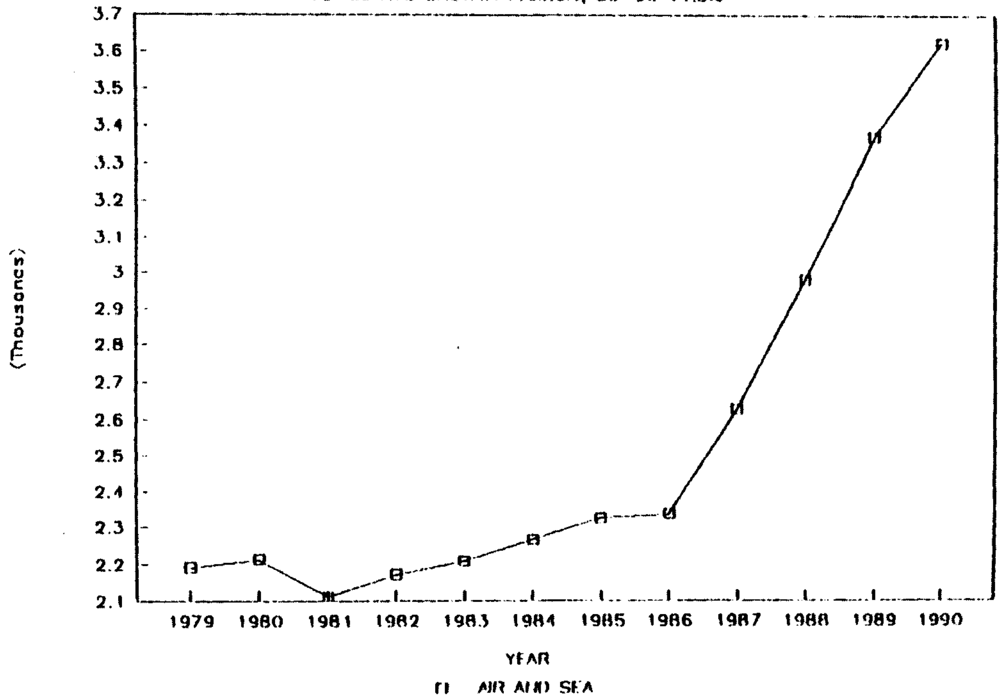


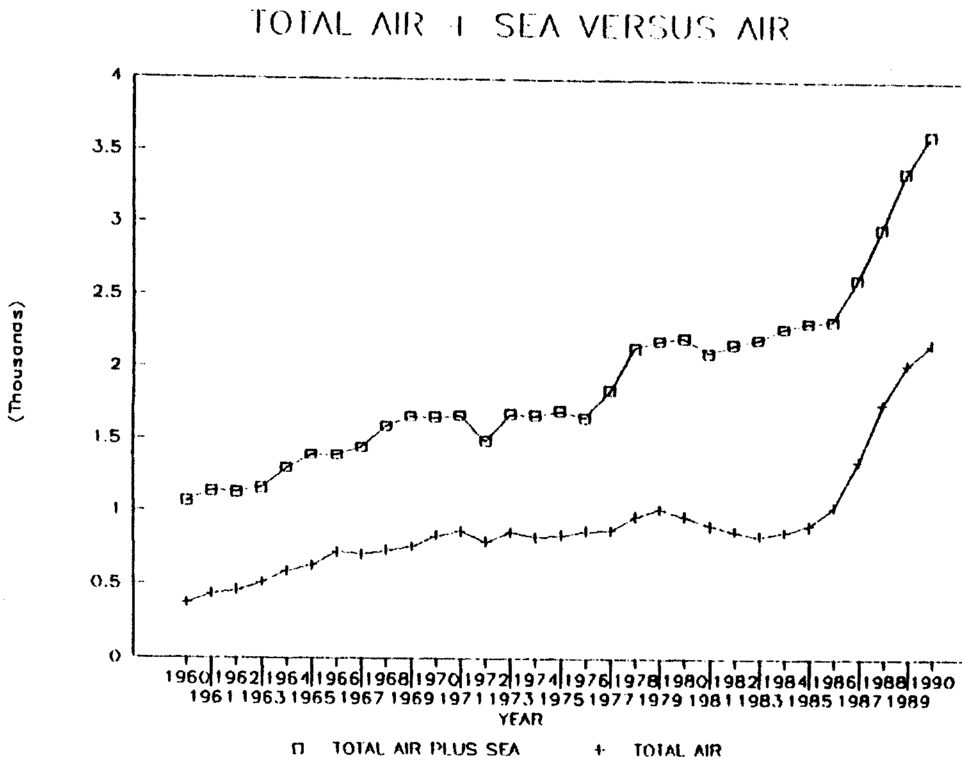
TOTAL MOVEMENTS 1969–1979



TOTAL MOVEMENTS 1979–90

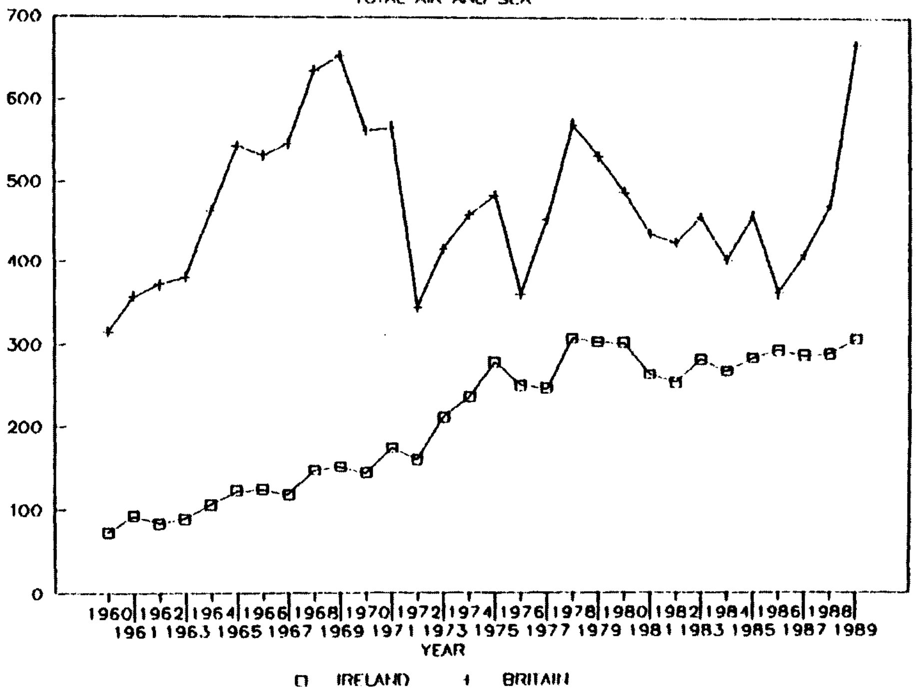
79–86 AVG GROWTH PA:0.9%; 86–90 11.3%



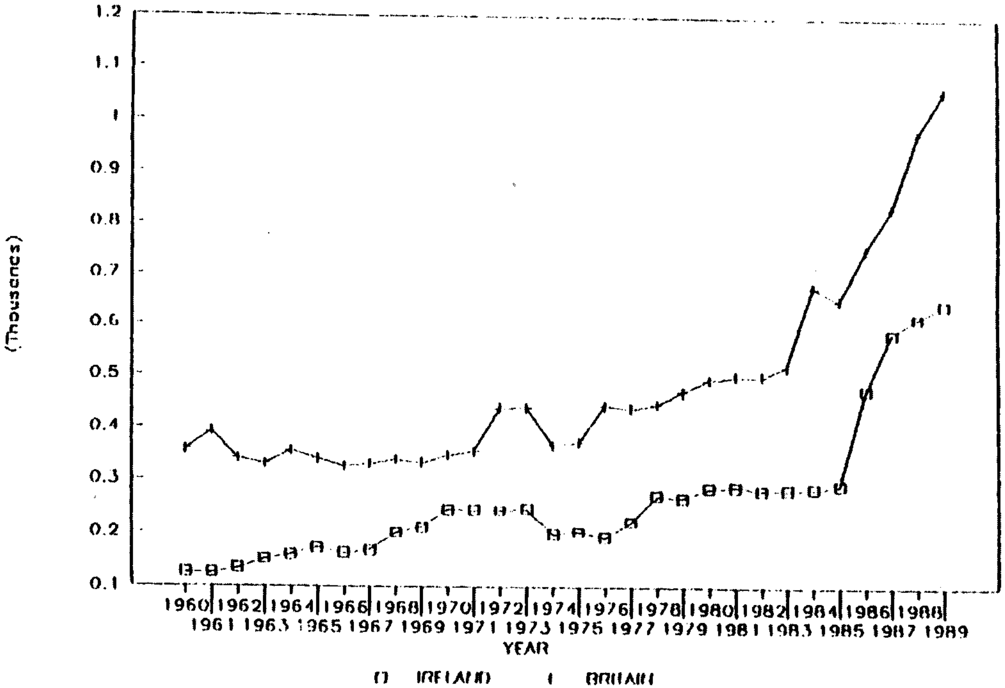

TOTAL AIR + SEA VERSUS AIR
(Thousands)
4
3.5
3
2.5
2
1.5
1
0.5
0
1960 1962 1964 1966 1968 1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990
1961 1963 1965 1967 1969 1971 1973 1975 1977 1979 1981 1983 1985 1987 1989
YEAR
TOTAL AIR PLUS SEA
TOTAL AIR

TOURIST MOVEMENTS IRELAND V BRITAIN

TOTAL AIR AND SEA



TOTAL VERS IRELAND V BRITAIN



TOTAL BUSINESS IRELAND V BRITAIN