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Treasury Chambers, Parliament Street, SW1P 3AG

Mr J H (Juan) Kelly  
President  
General Council of British Shipping  
30-32 St Mary Axe  
LONDON EC3A 8ET

4 December 1989

Dear Mr Kelly

Thank you for your letters of 29 November to the Chancellor of the Exchequer and myself, enclosing your 1990 Budget submission.

The Chancellor and I have read your submission with interest, and I can assure you that your representations will be given careful consideration. I look forward to discussing them further with you at our lunch on 7 December.

I am copying this letter to the Prime Minister, the Secretaries of State for Foreign and Commonwealth Affairs, Defence, Trade and Industry, Transport and the Chancellor of the Duchy of Lancaster.

Yours sincerely

PETER LILLEY

GENERAL COUNCIL OF BRITISH SHIPPING

PRESIDENT:  
J. H. (JUAN) KELLY  
Telephone 01-283 2922

30-32 ST. MARY AXE  
LONDON, EC3A 8ET

29 November, 1989

Peter Lilley, Esq., MP  
Financial Secretary,  
HM Treasury,  
Parliament Street,  
LONDON  
SW1P 3AG

cc. PS/IR  
Mr Morgan - IR

*Dear Mr Lilley*

I have today sent to the Chancellor of the Exchequer the Shipping Industry's proposals for measures to improve the condition of the Industry for inclusion in the 1990 Finance Bill. I enclose a copy of our submission for your information. I look forward to discussing it with you on 7 December.

*Yours sincerely*

*Juan Kelly*



## GENERAL COUNCIL OF BRITISH SHIPPING

PRESIDENT:

J. H. (JUAN) KELLY  
Telephone 01-283 292230-32 ST. MARY AXE  
LONDON, EC3A 8ET

29 November, 1989

The Rt. Hon. John Major, MP  
Chancellor of the Exchequer,  
HM Treasury,  
Parliament Street,  
LONDON  
SW1P 3AG

HM TREASURY - HCU	
DATE	30 NOV 1989
FROM	FP

Dear Chancellor

BUDGET SUBMISSION 1990

As you may recall from the material which you were given from our stand at the Party Conference in Blackpool last month, British Shipping believes that modest and temporary Government stimulation of the shipping industry would bring important benefits to the economy, especially the balance of payments and to our defence capability. I am, therefore, enclosing the proposals of the General Council of British Shipping for measures for inclusion in your 1990 Budget to encourage investment in shipping.

Our industry is well managed and of great value to the economy. We are a major contributor to the balance of payments - the third largest "invisible" exporter. But we could do much more. Without some modest measures of support, our contribution will fall away all too soon, as ships are not replaced with modern tonnage or shipowners move away from the UK to more benign investment climates.

We operate in a fiercely competitive, international environment - and would not have it otherwise. However, almost all other governments recognise the special value of their shipping industries and have taken appropriate action. As a result, the level of rates that the market will bear is the level that our assisted competitors can accept.

A very large proportion of the world fleet will need to be replaced by the mid-1990s. Shipyard prices are already rising fast and this trend is expected to accelerate. Those that have not reinvested by then will be at a major disadvantage. The British fleet is already old and many ships need replacing now. However, in an overall climate which favours short-term investment, shipping is not attractive to investors in the UK at the present time. We therefore propose a package of investment aids over a limited period of, say, five years, which would enable us to enter the small window of opportunity which is now available.



We have also proposed measures to make it possible to continue to employ UK seafarers. Measures of similar effect, allied to fiscal regimes conducive to investment, have led to the Norwegian flag trebling in three years and to large-scale renewal of the Danish and German fleets. We know that they will work.

It seems to us that there is very little time for action before the cost of renewing the UK merchant fleet rockets upwards. If, with your encouragement, British shipping can seize this opportunity, we are convinced that there will be very substantial benefits to the economy and to the nation - in terms of improved balance of payments, in due course a greater tax take, continuing support for trade generally, strengthened position of the City of London as the world's centre for shipping and maritime-related activity, and firmer assurance of our defence capability.

If, on the other hand, the opportunity is lost, our members will continue to thrive - but that will be either in other countries than the UK or in businesses other than shipping. Maritime expertise at sea and ashore will rapidly disappear. These major national assets, once lost, will be very hard to reconstruct.

I hope that you will give careful consideration to the proposals contained in the paper attached. We also look forward to discussing them with the Financial Secretary when he joins us on 7 December.

I am copying this letter to the Prime Minister, the Secretaries of State for Foreign and Commonwealth Affairs, Defence, Trade and Industry, Transport; the Chancellor of the Duchy of Lancaster; and to the Financial Secretary.

*Yours sincerely*

*Ryan Keen*



**THE WAY AHEAD**  
**SUBMISSION FOR 1990 BUDGET**

**General Council of British Shipping**  
**30/32 St Mary Axe London EC3A 8ET**  
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## BRITISH SHIPPING - THE WAY AHEAD

### A Memorandum by the General Council of British Shipping

#### SUMMARY

1. In the last 12 months our Norwegian, Danish and German competitors have seen substantial improvements in their fortunes. The Norwegian International Shipregister has grown by 86%. The Danish and German fleets have both turned from decline into growth.
2. This is against the backdrop of improvements in shipping markets that are as yet patchy and inadequate. But they give a foretaste of worthwhile opportunities for British shipping too, if its ageing fleet can be replaced.
3. Shipping is uniquely exposed to intense international competition. Almost all of the UK's major competitors receive significant help from their governments. Many have introduced new measures recently. The most effective are those of Norway, Denmark and FR Germany.
4. Investment in shipping is not attractive in the short term in the UK. Consequently, the British merchant fleet continues to decline and to age. UK registered ships on average are 13 years old and the total fleet, at 15.5m dwt, is down 8% on the last year. A fleet of around 13m dwt by 1992 is forecast, but new orders are at only half the rate to maintain a fleet of even that size.
5. British shipping companies have tremendous skills and expertise, at sea and ashore. But many have already diversified and few are captive members of the shipping community. For the United Kingdom to keep these skills the industry needs support. Without it, they could leach away within a very few years.
6. This would be a permanent blow to the balance of payments, to trade generally, and to a dozen other industries which draw heavily on maritime expertise. It would also severely damage the country's defence credibility. GCBS believes that already there are 300-400 too few ships, and far too few UK seamen to man them, for British shipping to meet its NATO commitments.
7. The need for help is urgent, as ship prices are likely to continue to increase dramatically in the next five years as old ships have to be replaced. Those companies who can build at today's prices will enjoy a tremendous advantage well into the next century. There is therefore both a small window of

opportunity and a longer-term threat to the viability of those who have to postpone investment.

8. Fortunately, a comparatively cheap remedy exists. The Government accepts the need to help many other sectors of British industry where the playing field is uneven - indeed most receive more Government support than does shipping. The EC Commission also accepts the need for government help to match outside competition so that the Community can enjoy the benefits that flow from a strong shipping industry. Pending the rolling-back of other countries' aids, which the Government - and GCBS - would like to see, a modest degree of pump-priming is needed for a period of, say, five years.

9. The effect on Government revenues of short-term aids to reinvestment is transitory - improved first-year allowances and rollover relief have costs which are subsequently recouped through increased corporation tax payments, and are really dependent on the scheduling of investment. Our best estimate is an average cost of £200m p.a. over the 5 year period in terms of deferred revenues. Aid to employment costs is estimated to be worth about £60m p.a. The pay-off for the whole package in direct cash terms alone would be a major contribution to the Balance of Payments that will otherwise be lost, and a substantial increase in the government's tax income from thriving shipping companies and the employment of British seafarers.

December 1989



## BRITISH SHIPPING - THE WAY AHEAD

### INTRODUCTION

1. The purpose of this paper is twofold. It describes the world scene in 1989, which has been marked by the quite exceptional improvement in the position of some of our European competitors, in Norway, Denmark and Germany. It then deals with the state of the UK fleet, the practical circumstances facing the industry now and, most importantly, the measures which other countries have recently adopted to respond to these factors. The message is one of opportunities opening up in most shipping sectors. The question is whether Government policy will assist UK shipping companies to take advantage of these opportunities, or whether the field will be left to our Continental and other competitors. Secondly, it stresses the value that the British shipping industry brings to the nation - to trade and employment, to the balance of payments, to the City of London, and to our defence capability.

2. In this analysis, the paper highlights two particular areas which require urgent attention if UK shipping companies are to make their full potential contribution to the country's welfare. These are the need for a positive climate for both re-investment in ships and for the employment of British seafarers.

### THE OUTLOOK TODAY

#### The World Scene

3. 1989 saw the continuing tremendous growth of the Norwegian fleet, up from 12.9m dwt in January 1988 to 29.1m dwt at end-October 1989. Almost all this tonnage was under the Norwegian International Shipregister, and the Norwegian fleet as a whole has now increased by 86% in the last 12 months and by 216% since January 1987.

4. Marked improvements were also shown by the Danish and German fleets. Both have turned round from decline to significant growth. Numbers in the three fleets show these changes in direction quite clearly:

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Norway	876	764	870	1363
Denmark	540	513	471	488
FR Germany	1300	1003	832	838.

(Source: Lloyd's Register; mid-year figures)

5. These fleets had in common major efforts by their governments to provide a favourable investment climate. It is clear that action to reduce their labour costs has also provided



a major boost, which long-standing investment incentives alone were unable to provide.

6. These developments took place against a background of marked, but not exceptional, improvements in many sectors of the market. Nevertheless, increases in freight rates to date have been insufficient alone to justify new investment. Government action to enable owners to prepare themselves for the necessary further improvements has been decisive in these three countries.

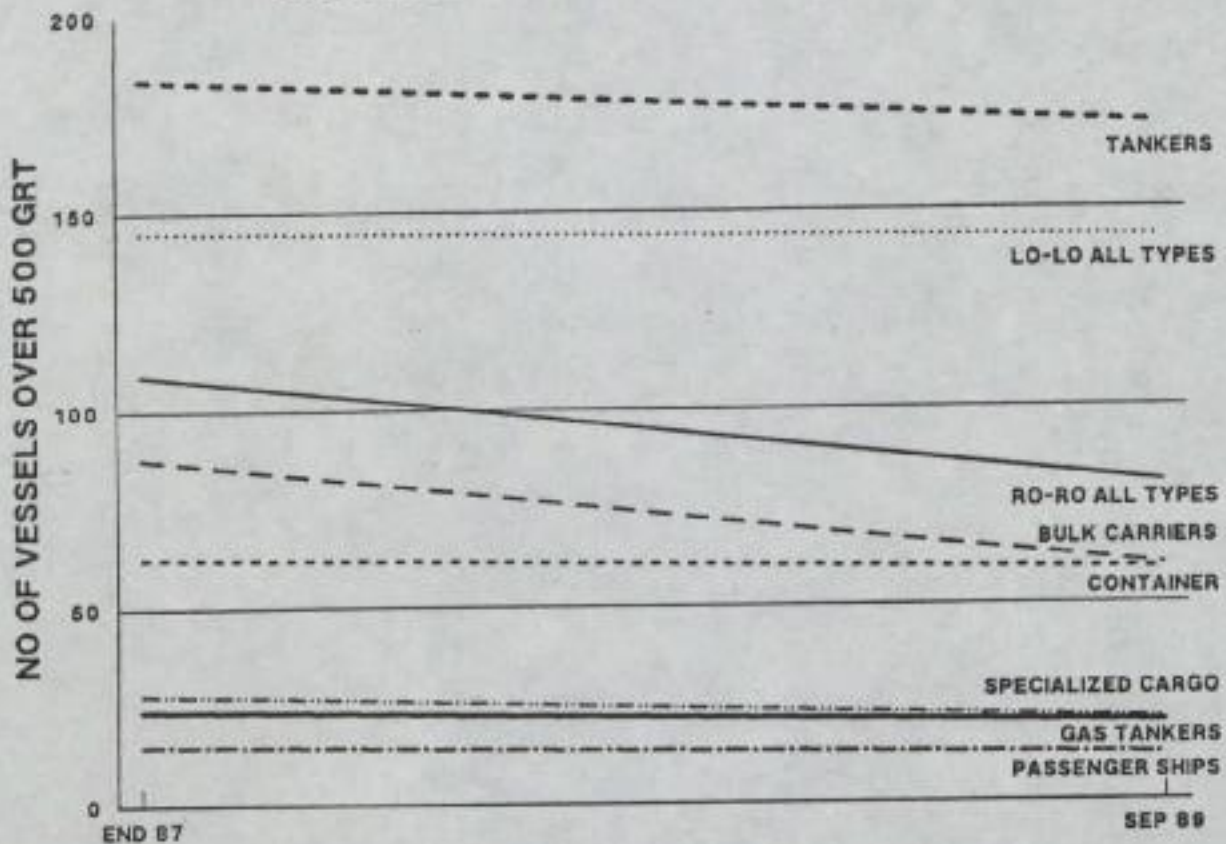
7. An analysis of the market position is contained in Annex A. To summarise, the world shipping scene overall looks better than it did five or even two years ago. In some respects, it is cautiously encouraging that most owners, banks and yards so far appear anxious not to return to the crazy days of give-away ship prices and highly leveraged financing. But for many owners, and particularly in the UK, the relief is only relative. Age and salt water continue to eat away at their assets and current freight rates are far below the levels at which investment in a newbuilding replacement would generate a proper return on the large sums involved. For example, a new 150,000 dwt tanker costing \$60m must earn at least \$40,000 per day to justify that investment - current rates are only \$18,000 per day. Only those that are favourably placed will be able to take advantage of the opportunities now opening up and of the further improvement in markets that will almost certainly occur in the next few years.

8. A new threat is on the horizon. Demand for new ships is set to increase dramatically over the next five years and beyond, as existing vessels just have to be replaced. Yet few of the shipyards closed down in the 1970s and 1980s will ever re-open and so prices can be expected to continue to rise. Those companies who replace their tonnage now will carry a far lower burden of capital costs than those who defer fleet renewal.

#### The UK Fleet

9. Unfortunately, British owners are not favourably placed and as a result the UK directly-owned merchant fleet has continued to decline. At end-September 1989 the fleet of trading vessels over 500 grt, stood at 582 ships of some 15.5m dwt, of which some 33% by tonnage was registered in UK mainland ports, 35% in British Dependencies and 19% in the Crown Dependencies.

## UK OWNED FLEET BREAKDOWN



SOURCE: Lloyds Register

10. Nevertheless, the UK-controlled foreign-trading fleet produced gross foreign exchange earnings of £2.7bn in 1988, or £3.5bn taking account of import-saving effects. The net contribution of this fleet to the Balance of Payments was £521m, or £1.35bn including gross import savings. To these figures should be added the import-saving effect of the British fleet's involvement in UK coastal trade.

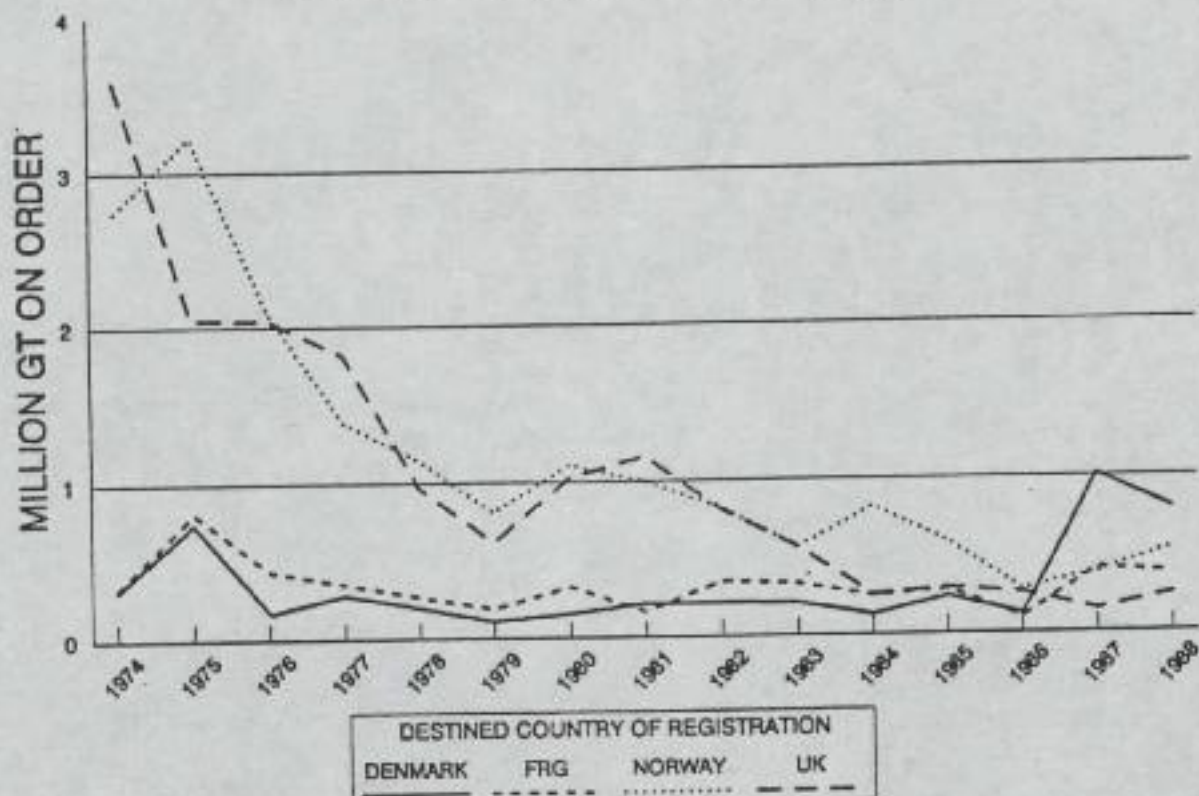
11. The UK industry includes well-respected household names whose quality of management and financial and operating strengths have been clearly demonstrated during the recent lean years. The larger companies are almost all part of larger industrial conglomerates, in which the shipping division has to prove its commercial value if it is to be retained. The companies engaged in the industry combine entrepreneurial flair, first-class management, experienced staff and technical expertise, covering every sector of the industry. They are totally capable of competing with other countries' shipping industries, provided the overall environment is similar.

12. The reason for the decline is that, despite the recent improvement in trading conditions, it is still difficult for many UK owners to justify investment in ships at a time when this is becoming increasingly urgent. The consequence is that, despite a welcome improvement since the bleak period in 1986-87 when 12



months passed without a single newbuilding order being placed by a UK owner for UK registration, the rate of renewal of the fleet remains far too low.

### ORDERBOOK AT END OF YEAR



SOURCE: Lloyd's Shipbuilding Returns

13. The UK-registered fleet in mid-1988 had an average age of 12.7 years against a normal economic life under West European conditions of between 15 and 20 years. In the container sector, the average age was 14.7 years. The UK age profile was significantly higher than that of most of our major competitors as can be seen from the following table, (the Norwegian figure is high owing to the very large investment in second-hand vessels over the previous two years):

<u>Country of Registry</u>	<u>Average Age of Fleet</u> <u>Years (mid-1988)</u>
Sweden	6.9
Belgium	8.2
Japan	8.2
FR Germany	8.3
Taiwan	8.9
Netherlands	9.1
Korea	9.7
Denmark	9.8
Panama	10.4
France	11.3
Norway	11.4
<b>World fleet</b>	<b>12.2</b>
<b>UK</b>	<b>12.7</b>
Liberia	12.8
Greece	13.4.

(Source: OECD Review "Maritime Transport 1988")

14. The latest available figures for the UK-owned fleet show that in the twelve months to mid-1989 the situation has deteriorated significantly, with the average age of the UK-registered fleet rising to 13.1 years and that of the whole UK directly-owned fleet, under all flags, being 12.9 years.

15. On the basis of the current order book, which stands at 12 vessels for UK registration, the renewal cycle of the UK-registered fleet is 29 years. In practice this means inevitable continuing contraction, as old ships reach the point where they cannot compete with new ones. After a certain age, the increasing cost of repairs and maintenance, and the higher fuel and crew costs of old ships outweigh the advantage of lower capital costs of written-down ships. In many sectors, notably containerships, new vessels also carry more than the old designs that they replace and hence offer economies of scale. And ship operators cannot provide the ultra-reliable and speedy service demanded by their customers in many trades, unless they periodically renew their assets to take advantage of technological developments.

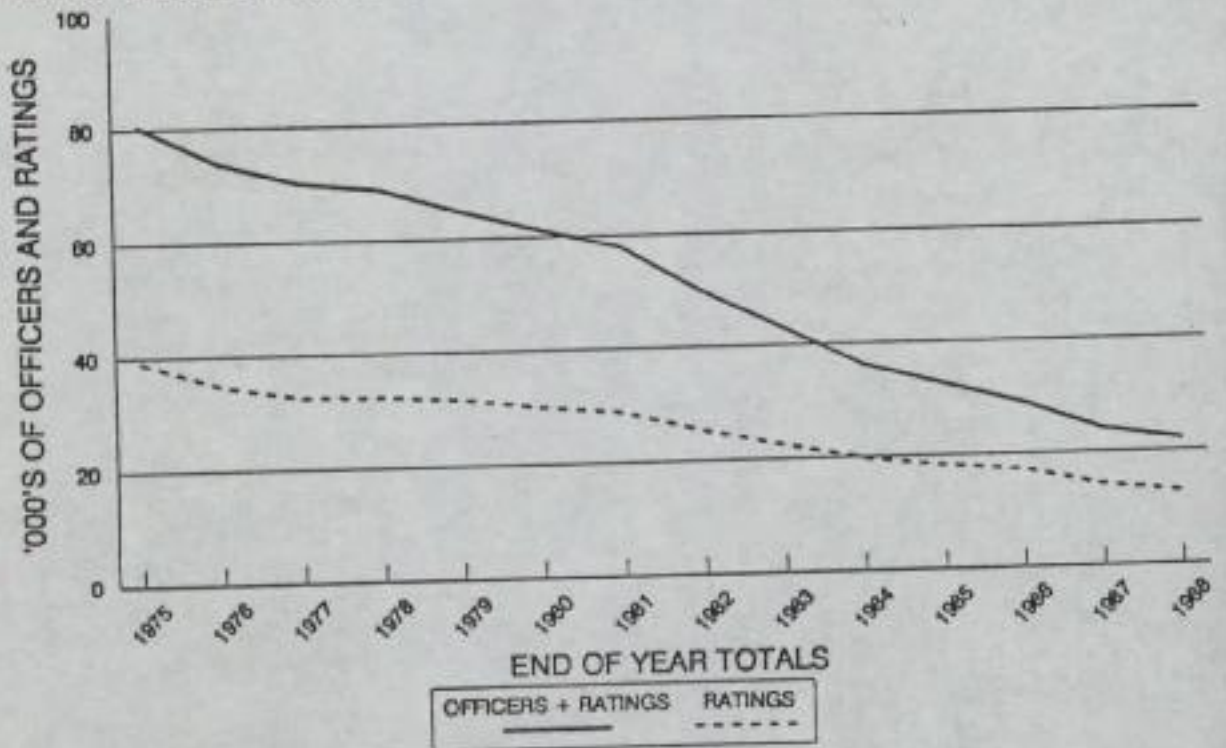
16. In September 1988, a GCBS survey of its members indicated a likely further decline, under present conditions, of 20-25% over the 4 years. In the first 12 months of that period, this forecast has been more than borne out with the fleet declining by some 8%. Even to maintain the 1992 fleet at around the



13m dwt that this forecast indicated, nearly 900,000 dwt needs to be ordered each year, representing an annual investment of some £450m. This is nearly twice the level of orders on the books at mid-1989. A UK directly-owned fleet of around 6m dwt within only a few years is thus a real possibility - with the UK-registered fleet likely to be only a fraction of that.

17. An allied problem is the diminishing number of British seafarers. During the depths of the slump, British owners had to cut back their operations, flag out many remaining ships and suspend recruitment if they were to survive. As a result, British seafarers have diminished greatly in number. The numbers registered with the Merchant Navy Establishment have fallen from 33,350 officers and 31,600 ratings in 1979 to 9,300 officers and 12,850 ratings by September 1989. (Perhaps a further 5,000 officers and ratings work on non-MNE ships.) The fall is equivalent to the working population of a major town - Southampton, for example.

### NUMBER OF COMPANY SERVICE CONTRACT AND REGISTERED SEAFARERS ON THE MNE'S REGISTER



SOURCE: GCBS

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18. Even in today's improved markets, operating costs are crucially important, and crew costs are the main variable. For many operators the yard-stick is the cost of a crew drawn from the highly competent officers and ratings available from the low cost countries of the Far East.

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19. If UK owners flag out, these seafarers become available to them. But in the longer term this is the route to national maritime insignificance. Not only do British companies prefer on commercial and operational grounds to have British seafarers managing their assets, they need to bring ashore trained ex-officers to fill many management posts. Many allied industries - ports, insurance, loss adjusting, classification societies and others - likewise rely on a continuing supply of trained officers. It is far better for the wages of seafarers serving on UK directly-owned ships to flow into the UK economy than for them to drain away elsewhere. And of course in countless wars, from the days of King Alfred to those of General Galtieri, Britain has relied heavily on the British merchant seaman, often at a heavy cost in casualties.

#### WHAT WENT WRONG?

20. Why is the British industry afflicted with these two problems - shortage of investment funds and a growing shortage of trained seafarers?

21. The answer is that the British Government is almost alone in leaving shipping to the unfettered play of market forces. Other governments have not, thereby making our position all the worse. It is a fact that shipping is far more exposed to international competition than almost any other industry. The rate of return is affected by what the most advantaged operator can accept. Although over the 15- to 20-year life of a ship, the income flows and foreign-exchange earnings can be good, the British capital market is singularly ill-suited to take a long-term view. Most shareholders are pension funds, insurance companies and other institutions, investing other people's savings in a highly competitive environment, where the yardstick is this year's return on capital. An investment in shipping is excellent in the long term for British companies and for the nation. Inherent "short-termism" is now obscuring a long-term view. As a result, without Government assistance to help us enter the race, British shipping may miss the opportunities that are now opening up.

22. The British Government's view is not shared by the European Commission. A similar basic economic situation faces all European shipowners. This is recognised by the Commission, which in August 1989 published a comprehensive and useful analysis of the present shipping climate in its consultative document on the second stage of a Community shipping policy. Among other things, the Commission highlighted that:



- while the problems facing shipping have eased in the last year, the changes in economic conditions do not eliminate the structural comparative disadvantages in regard to crew costs and tax treatment from which Community shipping suffers as against many third-country fleets;
- the loss of a Community fleet would have an adverse influence on the quality and cost of transport to and from the Community and thus damage the Community's trading position;
- there would also be significant damage to Community interests in terms of employment, balance of payments and defence.

The Commission concluded that urgent action needs to be taken by Members States if EC shipping is to serve the Community effectively. It is unfortunate that its proposals do not match its analysis, but it has only a limited role, particularly in respect of tax incentives.

23. Indeed, it is strange that the British Government should have such pure policies in respect of shipping (apart from some minor - but appreciated - aid for training and crew relief costs). It certainly does not practise the same virtues in respect of other industries against which British shipowners must compete for funds. The Enterprise Initiative covers consultancy costs for many aspects of commercial operations. The Eureka Initiative gives incentives to promote British technological penetration of European markets. The Regional Initiative scheme gives assistance to industry in many parts of the country. None of these are directed to shipping. Nissan, for example, has received £125m over five years since 1984 to set up operation in the UK and this assistance is scheduled to continue in the future if Nissan expands its investment here. Airbus is still a heavily subsidised loss-maker. In the transport sector, subsidies are used to support rail freight and even the scheduled airline industry is protected by a closely knit web of inter-governmental agreements.

24. Within the context of the European Community, the Government also accepts the Common External Tariff, which provides all land-based manufacturing industries with a considerable degree of protection. In addition, the Common Agricultural Policy is notorious for the high level of subsidy it provides to the farming community. Other investors receive assistance through European Community regional aid and European Coal and Steel Community conversion loans.



25. All these measures increase the attractiveness of investment in other industries. They all indicate a realistic acceptance by the Government that pure "market forces" are not enough if the other players have rigged the market. But, in shipping, the Government simply argues that other countries should wind down their aid. While this is a laudable objective, it is quite unrealistic as a response to our immediate problem.

26. British shipping should not be taken for granted. Two-thirds or more of UK directly-owned ships are owned by companies or groups which are already diversified into other industries. They know that other investments are more immediately profitable, they have the expertise to exploit them and they, like all companies, have a duty to their share-holders to obtain the best possible results for them. These companies could get out of shipping altogether and still survive as profitable - probably more profitable - entities.

27. Some UK companies - the oil companies are good examples - maintain fleets to provide a service for their main activity. They have so far decided that the balance of advantage lies in providing at least part of that service with owned ships. They could well decide to provide it entirely with chartered-in ships, and allow a foreign shipowner bear the burden of achieving profitable ship operations.

28. There is no inherent reason why other shipping services customarily provided with owned tonnage cannot use chartered, foreign-owned ships. Already some ferry and some container services used chartered-in ships.

29. The disadvantage of moving to chartered-in shipping is the erosion of both company and national expertise in ship-operation. In time, only the chartering option will be available and the company (and the nation) will have to pay the price that the open market demands. Chartering is also potentially a very expensive option, with costs subject to wild variations - for example, charter rates for container ships have doubled since 1986.

#### THE SANDS OF TIME

30. The blunt facts are that:

- this island nation has witnessed a drop in shipping investment that leaves the UK-controlled fleet (and UK-based seafaring labour force) heading towards the point when its massive reservoirs of skill and expertise, both ashore and at sea, will have been largely dispersed. The road to recovery will then be terribly long, steep and stony;



- the commercial opportunities in the present markets are better than for many years. A short look into the future is sufficient to convince GCBS that they will get significantly better still, as old ships have to be scrapped. If these opportunities can be seized, they should bring significant rewards both to the companies in question and to the nation;
- unless UK owners are put into a position to act quickly, the opportunities will be gone. The further dramatic increase in ship prices forecast for the 1990s represents a major threat to the viability of those owners who cannot reinvest now.

31. The opportunities are there for the taking. But they will have to be supported by positive and urgent action by the Government to enable British shipping companies to take a longer view than is now possible and thus to match their competitors.

#### HOW THE COMPETITION HAS RESPONDED

32. As indicated in the GCBS briefing paper "A Level Playing Field for Merchant Shipping?", published in May 1989, most of our European competitors (both inside and outside the Community) have in fact taken recent action to respond to the continuing decline of their national fleets. Some have long had policies of great value to their shipowners, but many have focused in recent years on improving the investment and operating climate in which their shipping companies exist through positive policies in regard to taxation and fiscal treatment. Others have concentrated on reducing manning costs, either by providing incentives to continue the employment of their nationals, or by permitting the employment of non-nationals at lower rates. Many have applied a combination of the two. Some countries have used the mechanism of a "second" or "international" register to achieve this objective; others have incorporated incentives directly into their national maritime policies. Since the GCBS paper was published, several further support packages have been introduced by Community Governments.

33. Government action in the three successful cases mentioned in Paragraphs 3-5 above can be summarised:

- Norway. Since the establishment of the International Register (NIS) in 1987, which permitted substantial reductions in crew costs, the tonnage under the Norwegian flag has trebled (as detailed in paragraph 3). The fleet has been substantially boosted by a long-term policy of tax incentives to invest in K/S limited-partnership schemes, designed to draw in funds from highly-taxed personal incomes. Norwegian K/S companies alone have attracted an influx in the last 2 years of US \$2bn (one per cent of the cost of replacing the entire world fleet!), which demonstrates that with the right encouragement and with the

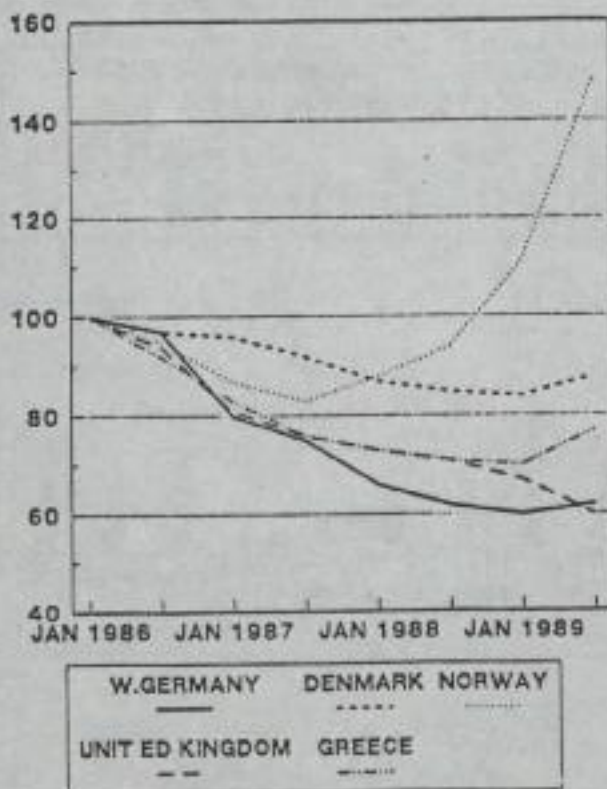
prospect of a reasonable return, substantial investment is available;

- Federal Republic of Germany. Since the establishment of the supplementary register in May 1989, the decline (28% since January 1987) has been reversed. In addition, long-standing tax incentives in Germany such as special depreciation and reinvestment incentives have produced a national fleet with an average age of only 8.3 years, with 70% less than 10 years old;
- Denmark. Since the establishment of the International Register in September 1988, 70% of the deep-sea fleet has now joined it. The fleet has expanded because of long-standing taxation and manning incentives such as limited partnerships, accelerated depreciation and tax concessions for seafarers. Its average age is under 10 years and there are 56 new ships on the order book.

34. It is worth noting that the largest European shipping industry, that of Greece, has long benefited from extremely low levels of corporate taxation, based on tonnage rather than profits. This gives Greek owners a particular advantage at times of improving shipping markets. Seafarers are also subject to very low levels of income tax.

35. The following diagram shows the fleet development in the three countries in which an international or second register has been recently established, as well as in Greece and, for comparison, the UK.

REGISTERED FLEETS BY NUMBER (100 grt & over)  
INDEXED TO JANUARY 1986





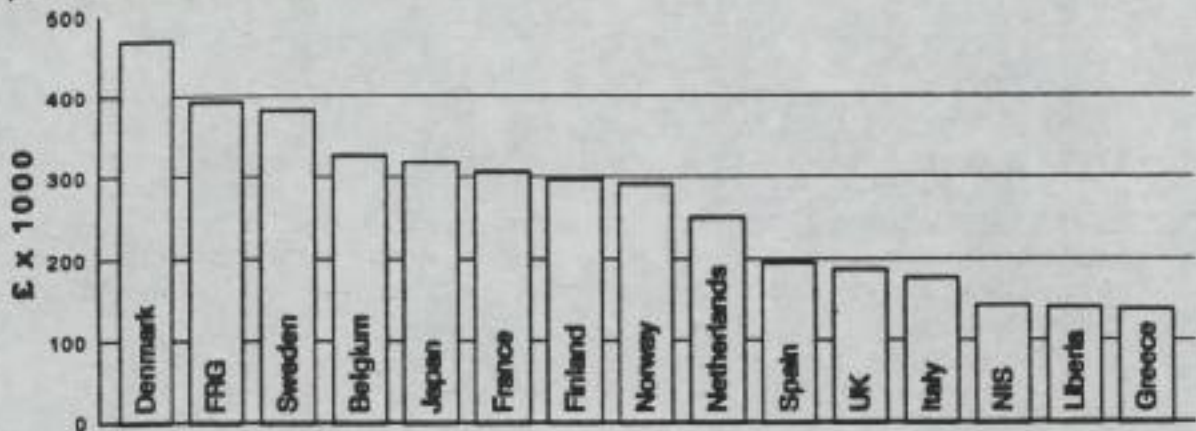
36. It must be remembered that the competition facing UK carriers is not only from within Europe but from the very competent owners from the Far East. Owners in Japan, Korea and Taiwan all receive considerable protection and support from their Government. In all, the GCBS Briefing Paper identifies between 70 and 80 different maritime administrations, amounting to nearly 80% of world tonnage which give major aid in one way or another to ships operating on their registers. In Europe alone, Belgium, Finland, France, Ireland, Netherlands, Portugal, Spain and Sweden have either recently introduced new measures or have them under active consideration. Market forces are certainly not dominant on the supply side of shipping. UK shipping companies are facing an unequal struggle in international trades.

37. Research undertaken by Professor Goss of the Department of Maritime Studies of the University of Wales, sponsored by GCBS, has investigated the overall value of this assistance. The draft report shows that, in the field of subsidies and corporate taxation alone, our major European competitors operate in a business climate considerably more conducive to investment in and the profitable operation of shipping.

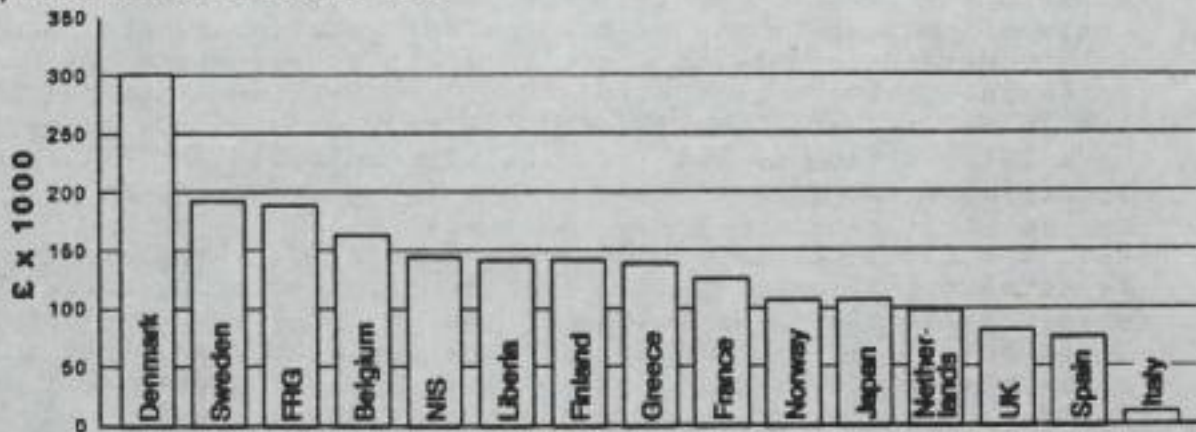
38. The value of various countries' fiscal regimes depends to some extent on the level of profitability of the industry. In times of high prosperity (15% pre-tax rate of return), the UK regime is not too bad - 8th out of the 15 regimes studied, but still inferior to those of Belgium, Denmark and Greece within the EC, and Finland, Sweden, Norway-NIS and Liberia outside. But in the far more realistic scenarios of low and medium profitability (5% and 10% rate of return respectively), characteristic of the shipping industry in recent decades, we are far worse off - 11th and 13th out of 15 respectively.

## FISCAL INCENTIVE TO INVEST IN NEW SHIPS ASSUMED DISCOUNT RATE OF 8%, INFLATION 5%

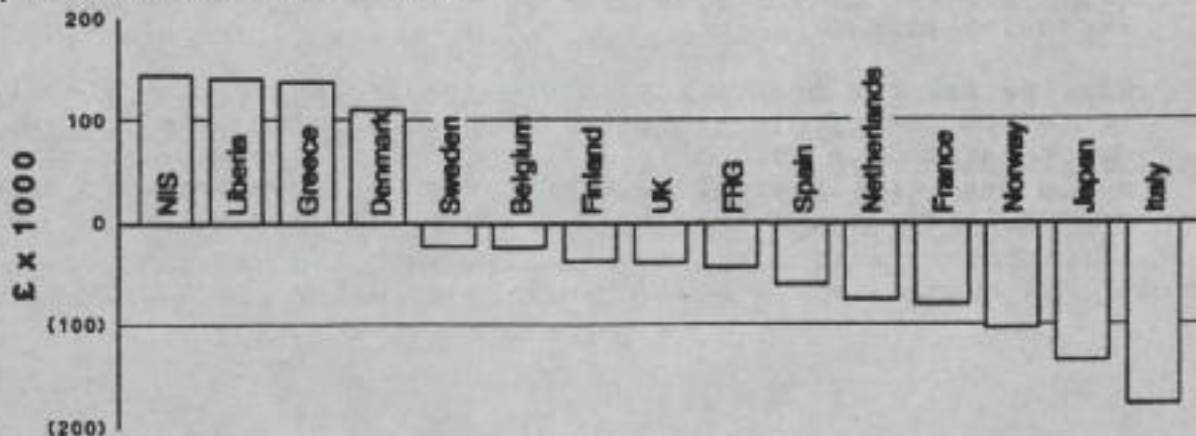
a) Pretax Rate of Return 5%



a) Pretax Rate of Return 10%



c) Pretax Rate of Return 15%



SOURCE: Prof R O Goss

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39. More important than the UK's position in the league table is the effect in cash terms of the different fiscal regimes on an investment in shipping. Taking the situation of medium profitability, the Dutch owner is 21% better off, the French 54%, Greek 70%, Belgian 99%, German 130% and Danish shipowner 268% better off under their tax systems than their UK counterpart. All this is external to the influence of the particular shipowner and has nothing to do with the relative efficiency of the fleets concerned.

40. What British shipping certainly does not need or seek is "cradle to grave" subsidies. What is needed, however, is a relatively small amount of pump-priming, in order to allow UK owners to reinvest in new ships and in trained British seafarers to meet the opportunities of the next decade. Relatively small-scale, low-cost measures would make an enormous difference to the ability of UK shipping to meet the nation's needs. Paragraphs 41-53 below describe what these measures could be. Immediate action would give a breathing space while the British government persuades other shipping nations to dismantle their systems of support.

#### THE WAY FORWARD

41. GCBS acknowledges, without apology, that its message is not a new one. The hard fact is that there are two areas - capital costs and manning costs - in which early action remains necessary if the decline of the UK fleet is to be reversed and the potential benefits to the nation of the British shipping industry are to be realised. What is new is that some of our competitors have taken action on both fronts, with splendid and entirely predictable results.

42. The first relates to AIDS TO INVESTMENT. The Government has rejected significant special treatment for shipping since 1984, when the fiscal regime which had led to 16m dwt of new ships being built over the previous decade was withdrawn. But this is still the single, most important area in which Government action could have an impact. There are two principal ways in which the investment regime for companies could be imposed - accelerating depreciation and roll-over relief - and useful minor assistance could also be given by altering the rules of the Business Expansion Scheme.

43. By far the most efficient way of improving the internal rate of return on ship investment is to provide for accelerated depreciation. A 100% ship allowance as a First Year Allowance would make the internal rate of return on investment in a new or good quality second-hand ship far more attractive.



44. While in any investment decision other factors (for example, risk assessment) are taken into account, the examples in Annex B, summarised below, illustrate clearly the improved viability of investment, and the improvement in the internal rate of return, which would result from a 100% allowance for two different types of ship. In most cases, the effect would be to increase the present rate of return to the shipping companies concerned by around 100%.

RATE OF RETURN			
OECD Finance		100% Equity Finance	
25% Writing Down Allowance (present)	100% Ship Allowance (proposed)	25% Writing Down Allowance (present)	100% Ship Allowance (proposed)
Short Sea Bulker	14%	34%	9%
Container Ship	8%	15%	4%
			12%
			9%

45. Such a measure introduced for a 5-year period would prime the pump for a rapid investment programme to restore and re-invigorate the UK merchant fleet.

46. Improved terms for Roll-over Relief for Corporation Tax would be of particular value to operators in the bulk sectors. Many of these rely on trading their assets, as well as trading with them, to maintain overall profitability. Their objective must be to buy in a depressed market and sell when prices are high. Secondhand ship values fluctuate markedly, as recent months have shown. It is in this way that many Greek and Norwegian entrepreneurs have built up their fleets.

47. Yet such activity is incompatible with current rules for "roll-over" relief of balancing charges, which require a new purchase to be made in the same accounting year as the old vessel is sold. This allows no real scope to time purchases to a falling market. So a British bulk ship operator is at once 35% worse off than his Greek counterpart (who pays no corporation tax at all) or his Norwegian colleague who - like owners in Denmark,



Germany, Netherlands, Spain, Japan and USA - can place the proceeds of his sale in a tax-free reserve.

48. Over the last two years, a number of shipping ventures have been able to make modest use of the Business Expansion Scheme. If the terms were more adapted to the market, it could produce considerable investment. Unfortunately, the opening-up of the BES to investment in assured tenancies of domestic properties has attracted most investors to these virtually risk-free ventures. Property Enterprise Trusts in Enterprise Zones - also attracting 100% personal income tax relief for investment in commercial properties - have absorbed even more private investment funds.

49. Yet paradoxically, a major limitation in the value of BES to shipping lies in the restrictions imposed on BES ship schemes, particularly the requirement that the vessel shall not be chartered out for more than twelve months at a time. This limit was introduced to import a significant element of risk-taking into BES shipping ventures, but has the effect of severely curtailing the ability of ship schemes to raise supplementary loan finance for the vessels they wish to buy. A lengthening of the permitted period of charter would greatly ease these financing problems by providing greater security of earnings and would go some way to offset the effects of the cap on BES funds. In the industry's view, the right period of permitted charter would be five years, but any increase would be of value.

50. The second area concerns MANNING COSTS which must be reduced if British seafarers are to be employed. There is a major opportunity here, for many European countries' wage and social security costs are so high that they cannot hope to bridge the gap with world costs and continue employing their nationals. Hence the NIS approach is to permit the use of non-Norwegian nationals almost without restriction. But UK costs are lower and government action could lead to greatly improved employment opportunities for UK seafarers.

51. The action needed is to eliminate National Insurance and Income Tax liabilities in regard to seagoing employment, in order to align the overall cost of operating UK-manned ships more closely with that of lower-cost competitors in world shipping markets, without reducing real wages to third world levels. As mentioned in paragraph 32 above, such measures have been adopted by a number of European governments.

52. It is vitally important that a mechanism be incorporated which ensures that the same net pay is received by the national seafarers, that they remain fully eligible for social security benefits, state pensions etc, but that the full advantage arising from the reduced income tax liability feeds through to the shipping company itself. This has been achieved in different ways in different countries. For example, in Sweden, the law



provides that the income tax payments of seafarers must be refunded to the employer; in addition, there are no employers' National Insurance contributions. In Denmark, income tax and social security payments were abolished in regard to seafarers at a time when the national collective agreements were to be renegotiated and a scheme now operates whereby special arrangements are adopted upon the acceptance of given net pay levels of remuneration.

53. UK shipping companies need comparable treatment if they are to compete on equal terms. Although the current income tax regime provides a welcome incentive for some seafarers serving on deep-sea ships to continue at sea, its impact is too uncertain to lead to lower costs overall for owners. The measures proposed would cut some 18% of the industry's wage bill.

#### THE COST TO GOVERNMENT

54. The cost of the investment incentive elements of this support package is difficult to quantify with close accuracy. It depends critically on the degree of take-up, timing, and the interface between the two types of measures. Both schemes would affect the future profile of revenue cash-flows rather than their quantum, with the costs of initial relief being balanced by greater corporation tax in subsequent years, including tax on the operating profits from the new tonnage.

55. Based on an annual investment in tonnage of £1 billion over the five-year period (ie 40 ships averaging £25m apiece) the average annual cost of 100% First Year Allowance to the Exchequer in deferred corporation tax compared with the present system of 25% reducing balance depreciation would be about £150m. The first year would have a high figure of £260m, which declines rapidly to only £75m in year 5. It is our belief that these amounts would be largely (if not entirely) offset by corporation tax due on the additional profits generated over the years by the operation of the new assets.

56. For Roll-over Relief, current annual levels of disposals are about £300m of fully-written-down vessels. It is assumed that one half of these are in any case covered by present arrangements for roll-over relief within the same accounting year. The deferred tax on balancing charges on the remaining £150m of disposals amounts therefore to around £50m p.a. which, again, would be recovered later on.

57. The proposed changes to arrangements for seafarers' income tax and national insurance contributions are also difficult to estimate, but it is thought that they would have an annual cost to Government of under £60m.



### VALUE TO THE NATION

58. Why should shipping be given special treatment? Just because the foreigners throw their money away, why should we? Isn't it just another activity - like textiles and making hi-fis and motorcycles - where we should give up trying to compete with the Far East? Should we not let those governments who are prepared to subsidise world shipping do so to our benefit as users of shipping services?

59. Firstly, as we have mentioned in paragraphs 23 - 25 above, the treatment would not be that special. What is special at present is that shipping is more exposed and less assisted than most other industries.

60. Secondly, there are real and concrete advantages to the nation in restoring and maintaining a strong merchant fleet. Shipping is a vital service in time of both peace and war. It makes a major contribution to our economy. It is not just a fashion industry that we can safely leave to others to provide. That is certainly the view of the other great island trading nation, Japan! Emphatically, it is not a "smoke stack" industry, where the UK cannot compete because our management is too arthritic. Given the right economic climate, UK shipping can again be a world leader. The advantages are set out below.

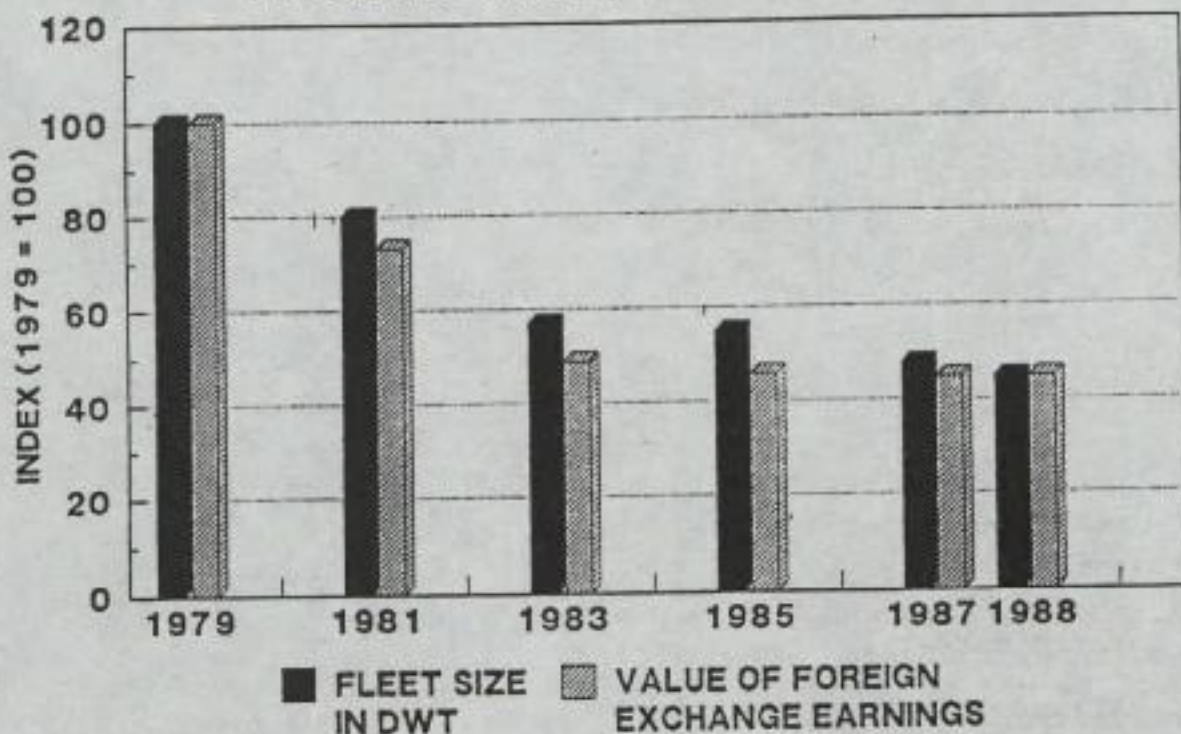
### Balance of Payments

61. There are few, if any, more efficient methods of earning foreign currency than by shipping. Other industries contribute to the balance of payments through a series of substitutions with all the inefficiencies that that implies. Shipping is more direct and involves far less leakage.

62. Although the Department of Transport has recalculated the basic statistics, it cannot be denied that British shipping companies make a major contribution to the balance of payments - £3.5bn gross and £1.35bn net (including foreign exchange saved when British imports are carried in British ships) in 1988. They are the third major invisibles contributor (after tourism and insurance but before civil aviation, banking and pension funds) and could therefore make a much bigger impact relatively quickly given a healthy investment environment. A detailed analysis of the overall contribution of shipping was issued by the GCBS in May 1989 under the title "British Shipping and the Balance of Payments". Past evidence of the ratio of fleet size to foreign currency earnings illustrates a close correlation (see table).



### SIZE OF THE UK OWNED FLEET AND ITS EARNINGS FROM ABROAD AT 1988 PRICES



SOURCE: CSO Pink Book & Lloyds Register

63. A UK fleet 50% larger than today (approximately equal to that of 1982) should benefit the balance of payments by a further £1.8bn or so in gross terms. Such a growth is by no means unreasonable - the Norwegian fleet grew by 86% in the last 12 months as a result of a combination of tax incentives and the virtual elimination of national crewing requirements. In contrast, the predicted 1992 fleet of 13m dwt without government assistance, would lead to a reduction in the current contribution of about £1bn.

64. There are those who claim that there are long-established and deeply-entrenched trends for even modest growth in the UK economy to lead to increases in imports outstripping increases in exports. Even if one does not fully accept that view, there is very little ground for optimism that the balance of our trade in goods will improve. Against the likely background of a £20bn deficit in the country's balance of payments in 1989, modest and short-term help to the shipping industry must be a good investment by the nation.



### Economic Value of the Industry

65. The commercial and social contribution made by the shipping industry to the nation was summarised at the beginning of this paper. The "shipping industry" in fact comprises several very different, but essential industries: deep-sea liner (largely containerised), bulk trades (both liquid and dry; both deep-sea and short-sea), ferry, cruise and offshore, all of which give direct and stable support to the movement of trade and British citizens. Ninety-five per cent of our trade, both with Europe and the rest of the world, and two-thirds of travellers across the English Channel still move by sea, despite the higher profile and expansion of the airline industry.

66. The industry provides employment for some 27,000 British nationals at sea and a further 13,000 shore-based jobs. Rationalisation and technological developments - on top of the decline in fleet-size - have reduced the numbers over the years, but seafarers remain an important and skilled labour force, which is a genuine national resource. The scope for greater employment of British nationals is dependent on fleet-size and the level of manning costs which can be achieved compared to the competitive world market.

### Allied Industries

67. The City of London still derives considerable revenue and strength from its position as the world capital for shipping and its multitude of maritime-related activities. It is the centre for marine arbitration, insurance, loss-adjusting, P & I clubs, shipbroking, chartering, classification, and other similar businesses. It provides a home base for the International Maritime Organisation and several other international shipping and seafaring associations. In short, it remains the traditional hub of the maritime world and gains considerable income from such activities.

68. It is notable that the Norwegians and the Greeks have both recognised the value of these ancillary industries and have begun respectively to try to develop and market the attractions of Oslo and Piraeus on the world scene as alternative maritime centres. They have explicitly recognised the importance of developing their own shipping industries in this connection and this provided one of the prime motivations for the establishment, for example, of the Norwegian International Ship Register (since NIS vessels have to be managed from Norway). With the advances in telecommunications of recent years and closer political and economic integration in Europe, other countries acknowledge the positive impact such activities can make on their balance of payments and see an opportunity to take London's position. The importance of this was recognised by the Government earlier this year when it abandoned plans to tax worldwide earnings of foreign



residents (which would have driven much of London's Greek shipping community abroad).

69. However, to support many of these activities, an experienced and skilled workforce with a practical maritime background is required. Such a workforce cannot be built up nor replaced at short notice. Maritime training has a long lead-time; training periods for officers vary from 4 to 10 years and further experience at sea may also be required. Without a merchant fleet there can be no recruitment, no training, no sea-experience.

70. Long-term vision is therefore critical if the influence of the City in maritime affairs is not to be diminished. If it is not to lose these lucrative sources of income, action must be taken soon to ensure the continuing flow of experienced seafaring personnel.

### Defence

71. Finally, but not least, there is the defence requirement that the Merchant Navy fulfils. The advantages of a strong merchant fleet in times of tension are well understood. It is only the UK directly-owned fleet that can be relied upon in such times to heed the nation's or NATO's call. The UK's contribution to NATO's conventional deterrent rests entirely on the ability to supply a large number of cargo ships to bring reinforcements and supplies across the Atlantic. British shipping could now have real difficulties in meeting its tasks of supporting and augmenting the Royal Navy; reinforcing Europe and Norway; bringing military supplies from North America; and bringing also essential raw materials, manufactured goods and food to keep industry and the population alive during a conflict of any duration.

72. GCBS believes that there is now a shortfall of 300-400 ocean-going, trading ships between the fleet currently available and what the UK needs to cover both its own requirements and its contribution to NATO. The Government has already acknowledged that there is a parallel cause for concern about the availability of crews who can be relied on to man ships in a crisis. This case has been developed in detail in a GCBS briefing paper entitled "British Shipping and Defence", published in September 1989.

73. Paradoxically, the new mood in Eastern Europe, forces reductions and American cutbacks in Europe shift the emphasis more than ever to trans-Atlantic reinforcement and resupply, and so to merchant shipping.

74. Shipping companies have to be motivated by their commercial interest if they are to retain the support of their shareholders and survive. But there is a market convergence between the commercial interest and the national interest - both are best



served by a climate in which British merchant shipping can flourish.

### CONCLUSION

75. The industry and the nation need a new era of effective co-operation between Government and the British shipping industry - co-operation which will enable the industry to provide the maximum contribution to the national interest. The potential is very clear at a time when the world's shipping markets have turned the corner and appear to be entering a new era of positive development. At the same time the major threat of heavily increased ship prices is looming and early action is needed. There is only a small window of opportunity.

76. This has been recognised by other governments, particularly in Europe, which have taken measures to ensure that their fleets benefit from the resurgence. The need has also been recognised by the European Commission. The value of such action has been clearly shown by Norway, Denmark and Germany. Only the British Government is out of step. Although there are long-term merits in seeking to persuade other countries to remove their systems of support, it is unrealistic to expect them to do this in the short term - non-European governments have to curb their measures too. As a result, this nation runs the risk of missing out on that opportunity and on the consequent financial returns and wider benefits - to the Balance of Payments, our other economic and City interests, and our defence capabilities - if it continues to sit on its hands, while the sands of time run out.

77. The General Council of British Shipping therefore calls on the Government to give British shipping industry the positive policy support which is available to shipowners elsewhere. The availability for five years of a 100% First Year Allowance, minor improvements to the rules for Roll-over Relief for balancing charges and to the Business Expansion Scheme, and the elimination of National Insurance and seafarers' income tax liabilities would give British shipping companies and British seamen the opportunity to reverse the recent decline and make their full contribution to the country's economy and national interest, in peace and in war.

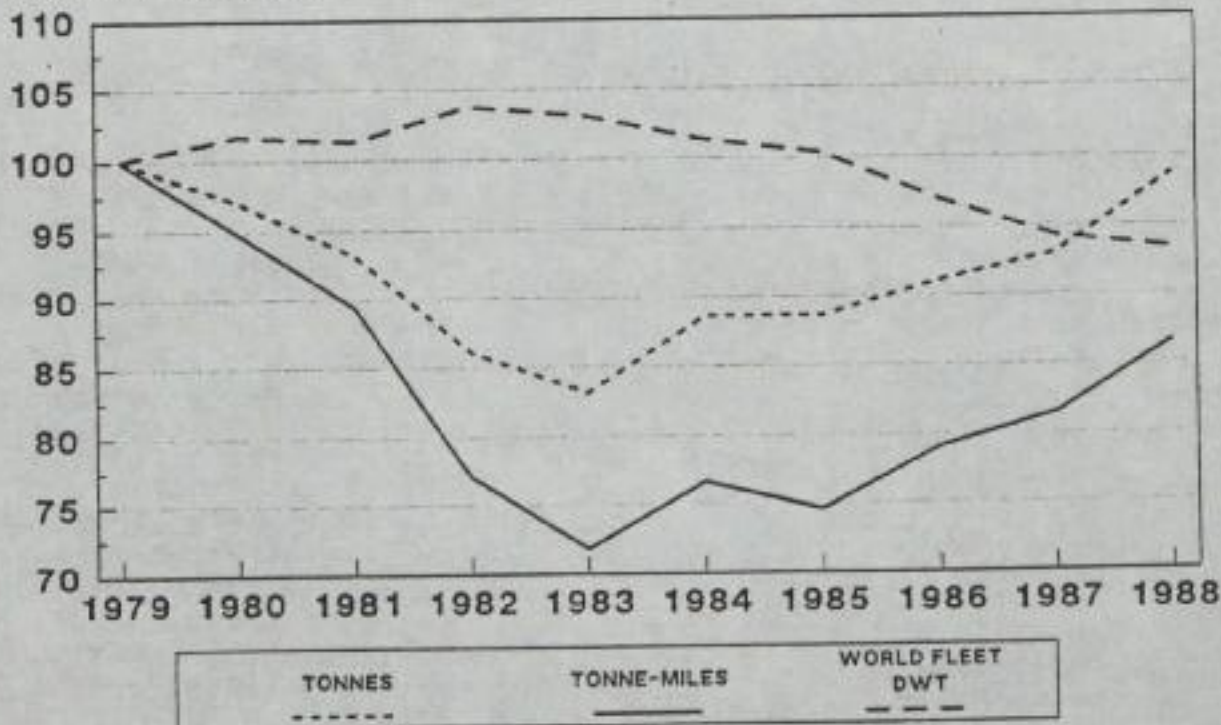
THE SHIPPING MARKET IN 1988/89

1. The overall outlook in shipping is better in 1989 than it has been for many years. There has been a significant up-turn in many, but not all, parts of the shipping market. However, it is being welcomed with caution because the financial improvement was from a very low base position, because similar signs of resurgence have often proved illusory and short-lived in the past, and also because unrestrained optimism could lead to excessive newbuilding orders, thus destroying the improvement.

2. 1988 was year of growth for world trade, and shipping benefited. In tonnage terms, seaborne trade increased by 6%, almost to the record levels of 1979. It has continued to grow, albeit more slowly, in 1989 and the record may well be surpassed this year. In tonne-mile terms, although there was real growth, volumes still remained well below the 1979 record levels, owing to changes in the pattern of trade over recent years.

**WORLD SEABORNE TRADE**

INDEXED TO 1979



SOURCE: Lloyds Register & OECD review "Maritime Transport 1988"

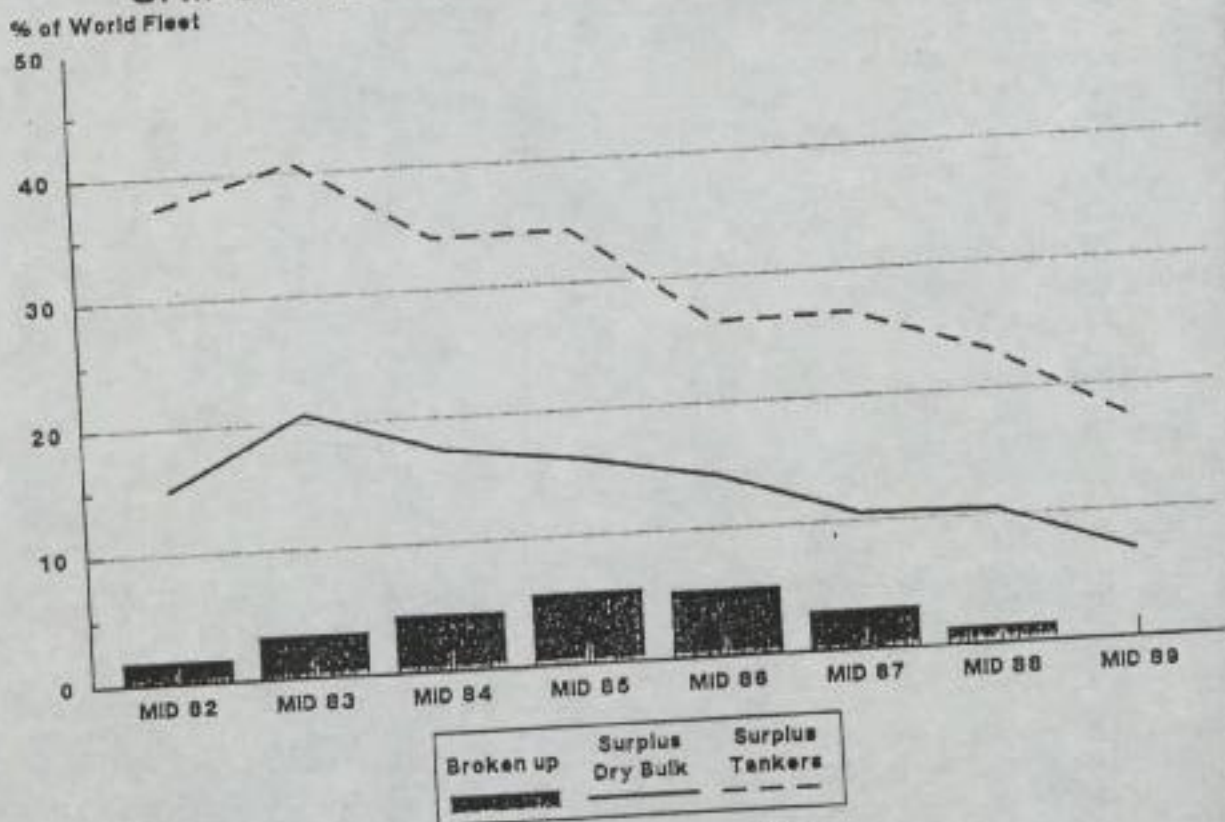
3. Different sectors of the industry were affected in different ways, with tanker operators enjoying almost continuous improvement during 1988, whereas dry bulk volumes have largely flattened out after a substantial surge in the first part of 1988.

4. This increase in trade, coupled with the lowest level of newbuilding deliveries for 25 years, led to a much closer balance



between supply and demand for shipping services, with consequent improvements in freight rates. In 1988/9, virtually all laid-up dry bulk carriers and most tankers returned to normal trading, and there was a 60% decrease over 1987 levels in the tonnage sent for scrap.

### SHIPS LAID UP/IDLE AND SHIPS BROKEN UP



SOURCE: Lloyds Shipping Economist & Lloyds Register

- In addition, in 1988, lower fuel prices together with the improvement in the markets removed any incentive to save fuel costs through slow steaming. Most of that hidden surplus capacity was therefore also removed.
- The improvement in freight rates has been generally firm a constant in the deep-sea dry cargo time-charter and trip-charter markets. The short-sea dry bulk and the tanker markets are more volatile and differ from trade to trade. However, here too, the underlying trend is one of improvement, although this is not necessarily steady. For example tankers have suffered a downturn after a sharp rise at the end of 1988.
- The position has been less satisfactory in the deep-sea liner sector, where there is still over-capacity in the container trades, although less dramatic than the chronic surpluses that have afflicted the bulk trades for so long. This oversupply has kept freight rates under pressure and in some cases has forced drop in the tariff levels. However, the negative effects have to some extent been off-set by the increase in trade volumes. Liner shipping companies, which have a stronger commitment to a particular trade than in most dry bulk markets, have to take a longer view when considering their investment decisions. Many



container fleets, in Northern Europe in particular, are renewing their fleets. Indeed, during this year alone, virtually all foreign deep-sea containership operators have taken delivery of new tonnage or placed orders (83 ships totalling 3.5m dwt in orders alone). UK operators have been almost absent from the picture with only three newbuildings.

8. Assuming a reasonable level of scrappings over the next few years, the liner companies with new tonnage will be able to benefit from the 30% increase in efficiency in terms of costs per container carried provided by the latest ships. Those without will be severely handicapped and less able to provide the level of service that shippers demand.

9. Cruise shipping has shown continued expansion with new tonnage continuing to come into all sectors, whether 4-day "bulk" cruises out of Miami, the 5-star Caribbean market or small Adventure Cruise operations. Despite forecasts of continued growth in cruise demand there are fears that some sectors will become over-tonnaged, especially now that Japanese operators are dipping their toes in the market.

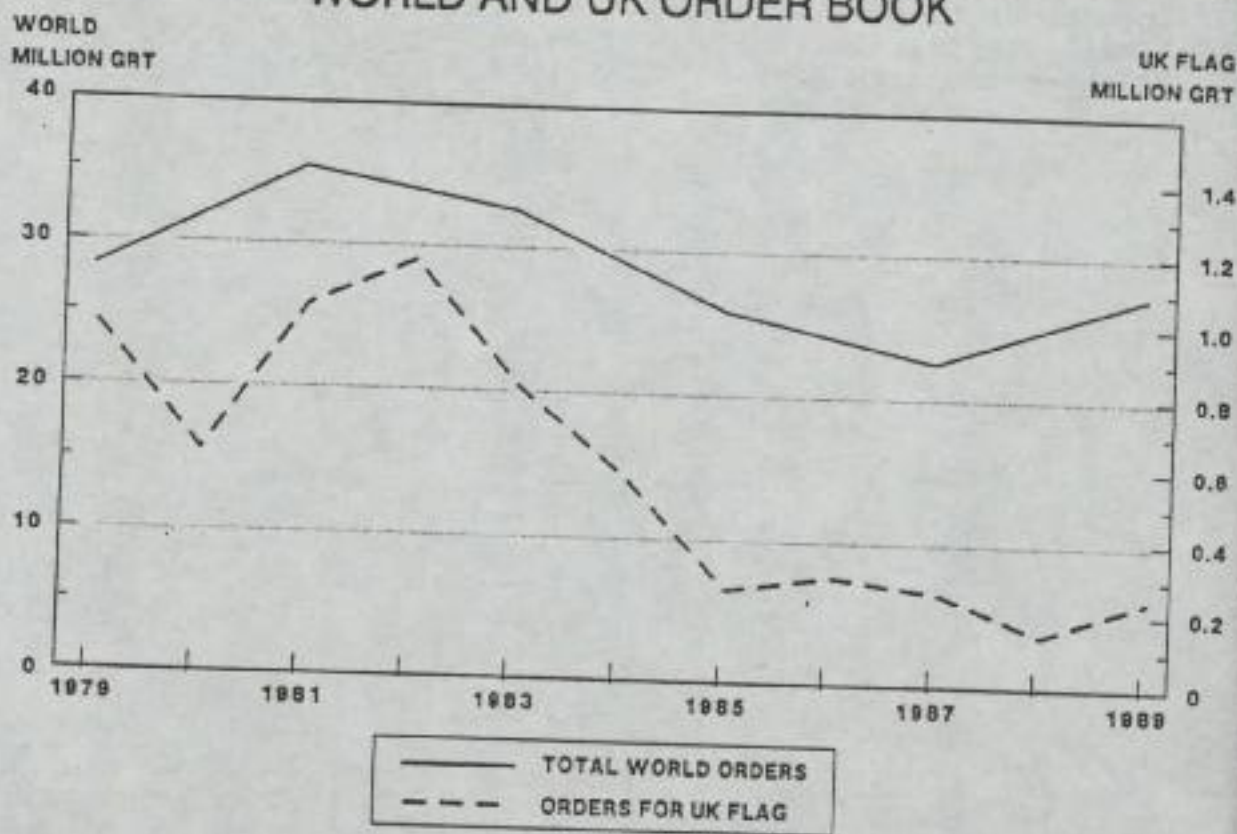
10. The ferry business within Europe has continued to develop positively and demand has been buoyant in terms of both passengers and vehicles transported. Competition is still intense on most routes and operations have generally been "trading up" into larger ships with a wider range of passenger facilities - almost of cruise-ship standard. This may be near to the maximum on routes to Scandinavia; operations on UK routes to the Continent and Ireland are farther behind, but have to bear in mind the likely effects of the Channel Tunnel, and a possible fundamental change in their costing structure if the EC imposes VAT on fares and withdraws duty-free facilities after 1992.

11. There are grounds for hope that the overall improvement in the market will continue. Orders for new ships, although increasing, have remained at lower levels than these of the early 1980s, partly because the governments of Korea and Japan appear to have tired of subsidising their yards to "buy" orders at below cost. The last year has consequently been marked by a substantial upwards surge in newbuilding prices and as a result many operators are seriously considering running on old tonnage. The major classification societies have developed condition assessment programmes to assist extending the economic working lives of existing ships beyond the normal 20-year span.

12. This price surge is likely to assume the proportions of a major threat during 1990s. The November 1989 report of a major analyst (County NatWest) estimated that the higher newbuilding prices now established will be subject to continuing and significant increases throughout the 1990s, fuelled by a markedly higher level of demand, particularly in the latter half of the decade. In the liner sector particularly, many of our competitors have active replacement programmes.



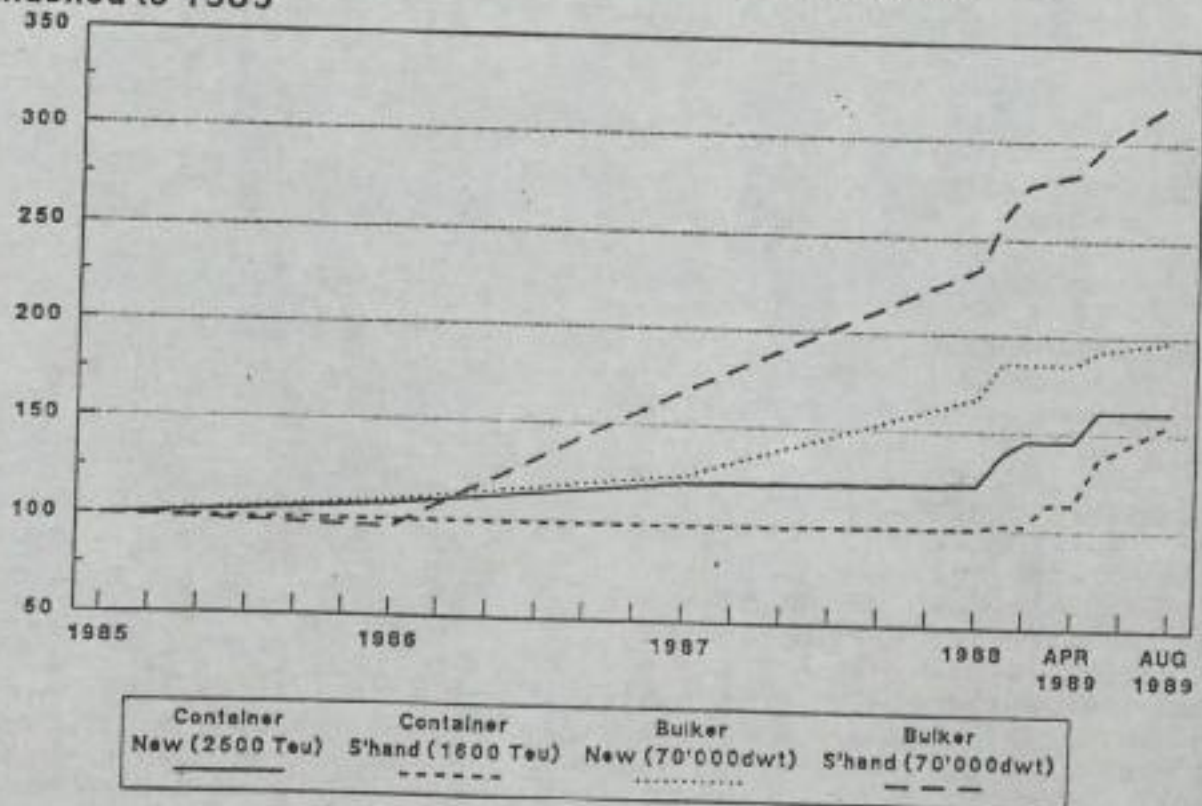
## WORLD AND UK ORDER BOOK



SOURCE: Lloyds Shipbuilding Returns

## NEW AND SECONDHAND SHIP PRICES

Indexed to 1985



SOURCE: Lloyds Shipping Economist

13. The improvement in revenues, coupled with this increase in new ship prices has naturally led to a marked rise in second-hand ship values - between 40% and 60% in some sectors - and which as yet shows no signs of abating. For the first time in a number of years, there has been substantial activity in the second-hand market. Norwegian, Greek and Far Eastern owners have been particularly active.

December 1989

AG  
RT  
1.4  
1.2  
1.0  
0.8  
0.6  
0.4  
0.2



EXAMPLE 1:                      3,000 DWT SHORT SEA BULK CARRIER

Net cash flow arising from finance costs, operating costs, earnings and capital allowances at 2 different rates.

£ M

YEAR	OECD FINANCE		100% EQUITY FINANCE	
	25% Writing Down Allowances	100% Ship Allowance	25% Writing Down Allowances	100% Ship Allowance
0	-0.6	-0.6	-3.0	-3.0
1	+0.1	+0.9	+0.6	+1.4
2	+0.1	-0.1	+0.5	+0.3
3	0	-0.1	+0.4	+0.3
4	0	-0.1	+0.4	+0.3
5	0	-0.1	+0.4	+0.3
6	0	0	+0.3	+0.3
7	0	0	+0.3	+0.3
8	0	0	+0.3	+0.3
9	+0.2	+0.2	+0.3	+0.3
10	+0.3	+0.3	+0.3	+0.3
11	+1.6	+1.6	+1.6	+1.6
12	-0.4	-0.4	-0.4	-0.4
RATE OF RETURN	14%	34%	9%	12%

NOTES:      Cost of ship £3m  
               Sale price, year 11, £1.25m  
               Annual earnings £600,000  
               Annual operating costs £317,000  
               OECD finance - 80% credit over 8½ years @ 8%  
               25% WDAs - current system of capital allowances ie 25%  
                           on reducing balance  
               100% SA - a 100% ship allowance

AUTUMN STATEMENT: PRESS CONFERENCE: SCIENCE

→ D.A.  
My Lib to me.

INTERNATIONAL COMPARISONS

RAC G  
11/11

Q. A recent SERC study (by Dr Atkinson) shows that West Germany spends nearly three times, and France more than twice as much as Britain on civil science. The figures you have announced today are not likely to significantly alter those proportions, are they?

A. No, but we must not over-react to figures which simply confirm our present understanding of where the UK stands compared with other leading industrial nations. Comparisons are of course notoriously difficult. It continues to be the case that the Government spends more on civil science as a percentage of GDP than the United States and about the same as Japan.

That is inputs. We are more interested in outputs. For example, papers published in the main scientific journals. The UK share remained constant at 8.3% of world output between 1981 and 1986, while that of Germany declined from 6.3% to 5.9%, and that of France from 5.1% to 4.8%. In fact the UK still remains second only to the USA. Not a bad record.

Q. A recent SERC report shows that there are serious equipment deficiencies in university laboratories. Will the new money you have announced today make good those deficiencies?

A. The ABRC will be advising me on the allocation of the additional money for the Science Budget in due course. They will doubtless consider carefully what priority equipment should have in their advice. We have also increased capital funding for the universities through the UFC by some £30m over three years. This is mainly to allow for new equipment.



Wednesday, November 15, 1989

A

# Britain 'trails in science spending'

THE INDEPENDENT

## Europe faces 'large scale migration'

By Tom Wilkie  
Science Editor

WEST GERMANY spends nearly three times, and France more than twice as much as Britain on civil scientific research and development, according to official figures published yesterday.

A separate study, also by the government-funded Science and Engineering Research Council, has revealed that scientific equipment in Britain's universities is out of date and needs replacing. To do contemporary science properly, university researchers need £240m of new equipment; to be able to do tomorrow's science, they need a further £200m.

The figures cover only university researchers funded by the council — not medical researchers or scientists in large research institutes distinct from universities.

The council's international comparison has revealed that the Government spent £2.3bn on civil science in 1987, compared with the French government's £4.8bn, and the West German government's £6.3bn.

The figures are bound to be embarrassing to the Government, which will announce next year's science funding as part of the Chancellor's Autumn Statement on public expenditure today. But both studies have been under way for a long time and their publication is coincidental.

Particularly worrying for the SERC is that more and more

equipment is being needed for research in the biological sciences. In 1986, 13 per cent of the grants awarded by the council in the biological sciences went on equipment; in 1988 the proportion was 32 per cent.

Dr Harry Atkinson, who conducted the international comparison, said: "We wanted to understand the organisation and anatomy of research in the three countries."

One conclusion seems to be that France and Germany spend more money per researcher; scientists get better salaries; better support; more laboratory technicians, and better equipment.

The study found that every scientist in Germany has roughly two lab technicians or support staff.

Dr Atkinson said the British system of supporting research mainly in universities had the advantage that "our science is continually refreshed by young people coming through the system". But it meant that most academic were at best only half-time researchers, and the organisation of research tended to be ad hoc. In West Germany and France, research tended to be carried out in institutes separate from universities.

EUROPE must be prepared for the large scale movement of scientists across national boundaries and an internal EC brain drain from regions where facilities are poor, Sir David Phillips, chairman of the Advisory Board for the Research Councils, said, writes Mary Fagan.

The same sort of risk applied to Eastern Europe as movement of people to the West became easier.

At a Royal Society meeting on science, technology and 1992, he warned of a major risk that scientists from Eastern Europe might emigrate, with inevitable economic consequences in the countries they left.

"It would be perfectly natural if they tried to control this in some way, yet in terms of human freedom we would all feel it is a very wrong thing to do," he said.

In the EC, the advent of 1992 would also mean a much greater mobility of scientists at a time when skilled young people were becoming scarce.

Sir David warned that European orchestration of science must also be avoided in the run-up to 1992, and decisions on what science took place must still be made by scientists themselves. In an outspoken declaration of support for science directed from the "bottom up", he warned that we did not need more supranational or national direction on science.

FINANCIAL TIMES

**Aerospace chair** 12  
SHORT BROTHERS, the Belfast aircraft and missiles company, is to sponsor a new chair in aerospace engineering at Queens University, Belfast.

12.

9/1.

Equipment for research

The failure of the provision of research equipment in laboratories in HEIs and SERC to keep pace with rapidly advancing experimental disciplines was reviewed by Council. Based on experience with Interdisciplinary Research Centres, SERC has estimated that a "pulse" of about £240 million is needed to provide modern equipment selectively in the subject areas that the Council covers. This compares with the results of a recent survey commissioned by ABRC from Manchester University's PREST unit; it found that to carry out research satisfactorily in existing areas, additional equipment to the value of £260 million was needed and a further £200 million for research in new areas. This excluded medicine and free-standing computers. The Council has asked its Boards to locate particular problem areas within the general picture of under-provision. The current Council bid of £72 million over three years represents a 30 per cent share of the under-provision.

European research

Dr Harry Atkinson, SERC's Director Special Responsibilities, presented a comparative study of French, West German and UK support for civil science. The figures in the table in the annex are of interest. The figures are for 1986-87 for the UK and 1987 for France and West Germany. Market exchange



rates are used, not purchasing power parities. Definitions were presented to Council by Dr Atkinson and will be contained in his report shortly to be published.

Year	1985/87	1987	1987
1985/87			
1987			
1987			

- ENDS -

Further information can be obtained from:

The Press Office, SERC

## Annex to item on European Research

Main features of R&D exchange rates used: £1 = DM3 = FF10 year	UK	France	FRG
	1986/87	1987	1987
population	55m	54m	61m
<b>Funding</b>			
total (including defence and industrial)	£8.8b	£12.0b	£19.0b
public civil (included in above)	£2.3b	£4.8b	£6.3b
public civil as % of GDP	0.61%	0.91%	0.93%
<b>Manpower (Full Time Equivalent, FTE)</b>			
total (including defence and industrial) -			
researchers	130k	105k	145k
support staff	156k	169k	256k
public civil (included in above) -			
researchers	39k	55k	48k
support staff	49k	53k	73k

Basic & strategic research (independent assessment)			
<i>including HEIs and equivalent (eg CNRS, MPG etc) pursuing basic and strategic research</i>			
	UK	France	FRG
expenditure	£1.85b	£2.55b	£3.40b
<b>FTE staff -</b>			
researchers	32k	44k	35k
support staff	41k	41k	51k